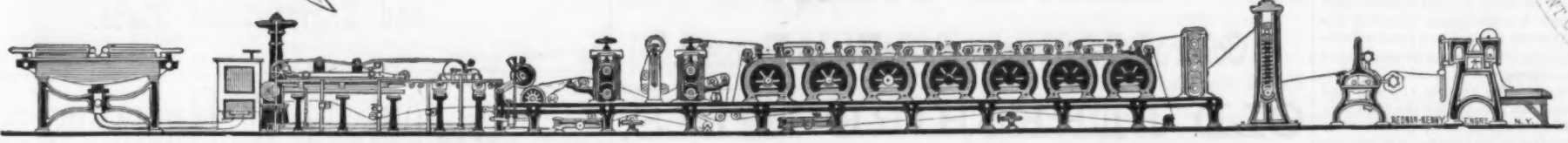


THE PAPER TRADE JOURNAL

RECEIVED LIBRARY
NOV 7 1880
PATENT OFFICE



"The Consumption of Paper is the Measure of a People's Culture."

VOLUME IX.—NO. 45.

NEW YORK, NOVEMBER 6, 1880.

WHOLE NUMBER 340.

Trade Topics.

Coloring Paper Pulp.

BY JULIUS ERFURT.

PART I.—CONTINUED.

Neutral acetate of alumina is a still better mordant for cochineal colors than alum or sulphate of alumina. The neutralization should however only be undertaken in the fibre itself, after the same shall have been saturated in a suitable quantity by weight of acetate of alumina in solution (or a solution of hydrated alumina in acetic acid), the best being milk of lime, provided the latter will prove injurious to the quality of the paper to be manufactured. For sized papers an alum mordant is decidedly to be preferred, although the coloring matter may not become as fully absorbed. A remarkably fine scarlet color may be produced by means of cochineal, if the pulp, dyed a bright red, be graded with a fresh decoction of wood. The latter not only produces handsomer, but more durable colors than other vegetable substances dyeing yellow.

Of the various descriptions of "reseda luteola" to be met with in trade the one procured from Cete is the most productive of coloring matter. Its stalks are thin and thickly covered with yellow buds which contain the luteoline, or coloring matter, which is extracted by boiling in pure soft water.

Fuchsine.—The artificial organic coloring substances have, of late, obtained great favor with paper manufacturers; so much so, that the use of natural dyestuffs has dwindled to comparative insignificance. Aniline, produced from coal tar, forms the basis of most of the artificial dyes. It emanates from the nitro-benzole, produced in its turn by treating benzene with strong nitric acid. The latter is rectified naphtha, which passes over on distilling coal tar. The term aniline originally designated the yellow substance formed by the decomposition of indigo in nitric acid; and only quite recently the same body was discovered in coal tar. The aniline itself possesses poisonous qualities, which are apt to be transferred to the preparations made from it, should they retain the impurities of the undecomposed basis, as frequently occurs.

In a crystallized or powdered condition aniline colors contain least unaltered aniline; but even the crystallized aniline colors may be productive of poisonous effects, inasmuch as the poisonous oxides used to produce them adhere to them more or less. To these belong arsenic, peroxide of lead, compounds of nitric acid, and chlorine with quicksilver, &c. Pure aniline substances are not poisonous, but they may become so in compounds with hydrochloric, arsenic, acetic or picric acids, or through the mordants used for fixing them on the pulp. Paper, for example, dyed with a solution of methyle or jod-green, for which the dye decoction has been acidulated with acetic acid, is not free from poison, and becomes poisonous to a considerable degree should the color have been shaded with picric acid. It is preferable, therefore, to substitute for the picric acid a dependent color dyeing yellow. To fix aniline colors, which greatly exceed dyewood color, in beauty and liveliness of tint, a thorough treatment of the pulp with alum will suffice. It is decidedly best to heat the pulp to 50° or 60° R., for the uniform and perfect dissolution of the aniline colors is materially enhanced thereby. The artificial colors should be dissolved in a great deal of water, so as to leave a few coloring particles as possible in suspension during filtration. The solutions should be prepared only a short time before they are applied, for by letting them stand, especially in uncovered vessels, they lose strength materially.

Aniline red, usually called fuchsine, is produced from aniline. It is distinguished for the extraordinary amount of coloring matter it represents as well as for the beauty of its rose and carmine tints. The inventor of this important dyestuff is A. W. Hoffmann, who produced it from 1 part of bichloride of carbon and 4 parts of aniline. In manufacturing it is made from aniline and neutral oxide of quicksilver, or from aniline and arsenic acid. Fuchsine containing arsenic may be purified as follows: The powdered raw color is treated with concentrated hydrochloric acid, and subsequently diluted with water. Caustic soda is added to the clarified solution in sufficient quantity to leave a light sediment. The arsenic remains in solution in the lye, while the color is precipitated. By washing the precipitate repeatedly in cold water and subsequently filtering it, it is obtained in a pure state.

Fuchsine is, at times, adulterated with raw sugar, but this seldom occurs. The diminutive crystals of the sugar are colored with the fuchsine, and, on drying them, they assume the

golden, greenish lustre peculiar to the crystals of fuchsine, a color similar to Florentine bronze, rendering the adulteration imperceptible to the eye. Experience has shown that aniline preparations made in Germany are free from such adulterations, but they are at times discovered in those from abroad, or manipulated by unscrupulous dealers. Merchandise of this kind, of inferior value, however, soon shows the little coloring strength it possesses. Of 1 diamond fuchsine, 300 grains are dissolved in 30 litres of pure soft water, and then boiled for five minutes and stirred continually. During the boiling, the scum appearing on the surface is carefully removed, until the entire solution appears clear, when it is filtered. The most brilliant rose tints are obtained from refined diamond fuchsine. The kinds met with in trade are yellowish pure red, and sorts of a bluish cast. Fuchsine is little suited for securing yellowish red tints, for the bluish cast, inseparable from it, operates unfavorably.

Weak fuchsine solutions are also frequently used, instead of bright red or cochineal in connection with a blue dye, for whitening paper pulp, especially where cheapness is the main object to be attained, and where a fast color is a secondary consideration. In this way it is feasible to change white paper containing wood fibre and having a greenish yellow shade, which arises on employing a blue coloring substance, to a tint pleasant to the eye. But it should be mentioned that white paper colored with fuchsine has the drawback that it looks dark in lamplight. A handsome amaranth red may be elicited by toning down fuchsine-carmines with methyl violet. Aniline red may be advantageously employed for imparting liveliness to dyewood colors. It may be remarked, in summing up, that the aniline derivatives commend themselves, as a general thing, by their simplicity of adaptation and the fire which characterizes their tints; they are, therefore, specially useful in imparting beauty to other colors, dyewood decoctions in particular.

Cerise (Cherry Red).—There appears in commerce an aniline red, designated by the name of "Cerise," frequently used for coloring common sorts of paper, on account of its cheapness. The shade it produces direct is between scarlet and carmine, but is not free from a brownish tinge, which is important, inasmuch as it enables us to employ this dye for shading brownish-red colors. One part in weight of cerise is dissolved in six parts of water, acidulated with acetic acid, and the solution is boiled thoroughly, while scumming should not be neglected; and, while to one part by weight of fuchsine at least four parts by weight of alum are necessary for mordanting the pulp, four parts of alum will be sufficient for 1.75 parts of cerise dissolved in acetic acid.

Naphthaline Red.—Naphthaline red (Magdala red) approaches in color fuchsine red, but is less brilliant and not so fast. Not possessing any advantage in point of cheapness, its application cannot be recommended.

Safranine.—Safranine produces the most delicate rose tints. It is handled the same as fuchsine and is adapted for coloring letter paper, fine wrapping paper, &c. By using a handsome yellow phosphine, brilliant scarlet tints may be produced on safranine.

[To be Continued.]

How Wood Pulp is Made in Germany.

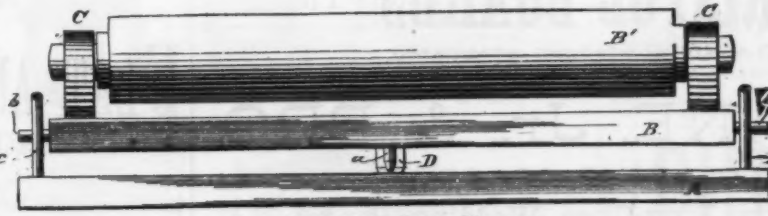
No. III.

The grinding machines, of which there are from three to six in number in most cases, are fixed in a gallery at the extreme end of the mill. This gallery is purposely raised, to allow the pulp from the grinding machines to fall of its own accord into the knotters, vats, &c., which are situated about 5 feet or so above the stone floor of the building. All the other machinery for making the pulp into sheets or boards is upon the floor itself, and, as a rule, is laid down with every attention to convenience and economy of working.

In C. Eickhoff's mill there were six grinding machines, running at about 150 revolutions per minute. The pulp runs from three of these machines by shoots into one common shoot, which conducts the pulp from the three grinding mills to a knotter, of ordinary vibratory construction. While the pulp is running to this knotter, it has to go through a fine outlet, which arrests any splinters of wood that have been unground or that have split off the wood against the stones. These pieces collect until they can be removed and thrown away. The other

pulp then runs upon another lower knotter, and I noticed that several mills used various methods for reducing the noise of these knotters. One mill was working a perfectly silent one. This is a great improvement over the fearfully noisy and somewhat rude contrivances for producing the shake. The knotter, in many cases, was driven by a small pulley immediately over the outfall of the pulp. This is a bad arrangement, as the fast strap often throws or shakes small pieces of dirt and hardened gritty matters into the pulp. Consequently, black specks are not uncommon in the pulp. The shake of the knotter is produced sideways, by two pieces of iron by which the end of the knotter is suspended. The knotter is like an elongated shovel, perhaps, and the pulp running down this long piece of vibratory "wire" is, so to speak, partly machined. It falls from the end into a tank, and from this tank it goes into a "refiner." This may be described as an intermediate grinding mill, which regrinds the coarse pulp that does not run through the wire, and reduces it to such a state that, as it runs out of this refiner, it can

Fig. 1.

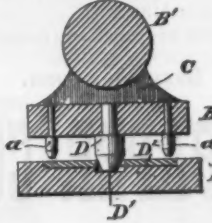


GUIDE ROLLER FOR PAPER MACHINES.

mix with the fine pulp, and run to the board machine.

In a good mill these operations are all accomplished by mere gravity, and no force is necessary for conveying the pulp from one process to another. The various processes are arranged upon a carefully prepared flight of steps, each one of which is sufficiently raised to allow the last to conduct the pulp to the machine. I noticed, however, in one or two mills, where extra care or additional knotter power was used, that

Fig. 2.



stump pumps had to be used. These, however, were worked, as well as the other preparatory machinery, by shafting and gear, driven by the water wheel.

When water is plentiful the whole of the six grinding mills are kept in full work, and run night and day. They grind more pulp than can be made into boards or dry pulp, so, with a view of providing against a dry day, some large concrete tanks are built to receive the surplus ground pulp. The excess from the grinding mills which, if allowed to run, would overflow the knotters, is run into this large store tank where it drains, the backwater going into a deep tank outside, and running round a series of divisions, like the letter S, somewhat. This causes the pulp to settle, and thus this sediment is saved. In the winter, when the full water-power is not to be had, and when, perhaps, only two or three grinding machines can be used, this store tank supply of ground wood comes in very useful, and keeps the board machine going.

The board machine is a simple yet ingenious contrivance. There is a barrel wire running in a tank of stuff from the knotters. The pulp settles upon this wire barrel, and is conducted away upon a wet felt, in a very thin sheet. It does not go very far or very fast. The wet sheet goes to a roller made of solid beechwood. This roller has two small grooves along its entire length, about half an inch deep, but very narrow, only large enough to admit the blade of a knife. There is, upon the machine side of this roller, a small pulley, which is placed very close to the roller. The pulley is upon a small rod, which rests upon two bearings fixed in the machine frame. At the right-hand side of the roller is a small bell, which is set ringing immediately the small pulley moves. The pulp from the machine collects in layers upon the roller, until it becomes thick enough to touch the pulley upon the other side. As every revolution of the roller makes it a shade thicker, it at last causes the pulley to revolve when the bell rings, and the man in attendance at

the machine takes a knife, and inserting it in the groove runs it straight across the roller, thereby separating the pulp in the form of a thick collection of layers of fibre. This sheet is then folded into three, and laid on one side, whence it goes to a strong hydraulic press and is pressed flat. It is then boxed or packed in the well known wooden frame or cage, ready for the market.

Another form of pulp, however, is made. A doctor blade is allowed to rest over the roller, and the fine, thin sheet of fibre turns on meeting this and is automatically peeled off, falling of its own weight into a box or suitable receptacle. It is then torn up into smaller pieces and packed into bags, and in this form consumed by the home paper-makers. In this condition it contains 51 or 60 per cent. of water, and where carriage is of no consequence it is far better to use this form of pulp than the other, and especially the dry varieties. This is the first quality of pulp made, and the thick cardboard like material is the next, whilst the third quality is the waste from the knotters and the settling or backwater tank referred to.

After seeing all this I naturally felt rather hungry. I had been alone in the mill for about a quarter of an hour, taking some notes, and looking about me. During this time I had missed the breakfast so kindly prepared for us by Mr. Eickhoff, and it was only the cheering at the proposal of Mr. Eickhoff's health that called me to a proper sense of my foolishness in neglecting the inner man.

However, I endeavored to make up for the lost time when I did start, and after a capital breakfast I had a look at three new pieces of apparatus, one for peeling the bark off the pine wood, and two for testing the moisture in wood pulp. These machines I will describe in my next.

[To be Continued.]

A Crushing Process for Wood.

One of the most recent processes for the production of wood pulp is designed to secure a long fibre pointed at the ends and broader in the middle, of greater or less length, according to the desire of the manufacturer, and to effect these results entirely by mechanical means, thus avoiding the use of chemicals, and furnishing a pulp which is, without their employment, fit for use in the paper maker's vats.

In carrying out the process wood of any suitable variety is sawed into blocks at (or as near as practicable at) a right angle with the grain of the wood, which is thus left from one-eighth of an inch to one inch in extent, measured from one cut side of the blocks to the opposite cut side—that is to say, the blocks are sawed off in thicknesses ranging from one-eighth of an inch to one inch. The blocks thus cut are then laid upon a firm support of some suitable solid material—say a smooth, flat-faced mass of iron—in such a manner that the grain of the wood is in a vertical position relatively with the face, and are then hammered upon the cut ends of the grains till reduced to fibre of the requisite fineness. A trip-hammer is preferably used for thus disintegrating the wood. The effect is said to be to separate the wood into its cellular fibres without materially breaking these fibres across, and hence to produce a paper stock of equal strength, capable of making a stronger and more perfect article of paper than can be done with pulp of shorter fibre, or fibre partly broken between its ends.

The claims of this process are the manufacture of paper pulp from wood by first sawing the wood at (or as nearly as practicable at) a right angle with the grain into blocks of various thicknesses, according to the nature of the fibre to be produced, and then subjecting these blocks to hammering applied in the direction of the end of the grain till the blocks are reduced to pulp of the required fineness. (331,730.)

Guide-Roller for Paper Machines.

The drawings given herewith illustrate an improvement in guide-rollers for the wire web and blanket felt of paper-making machines; and it consists in the construction and arrangement of devices whereby the rollers are automatically adjusted to any unequal preponderance of the trend or travel of the blanket, which is thus enabled to assume a central course without curling at the sides.

Fig. 3 is a transverse section taken through the centre of the roller and frame.

On the cross-bar A, which is permanently attached to the machine, are placed the roller-

frame B and roller B', which roller is suitably journaled in boxes or bearings C.

From the under side of the roller-frame extends a pin, or pivot D, which pivots in a hole, D', in a transverse plate D², upon the cross-bar. At each side of this pin D is a steady-pin, a, which permits the roller and roller-frame to move up or down upon its centre and pivot itself on the pivot D, while the pin a prevents the roller from moving sidewise.

Guide-pins b b extend from both ends of the roller-frame and operate against pins c c, placed in an inclined position on the cross-bar, as shown. These inclined pins c c may be placed in the cross-bar back of the roller and roller-frame when a wire web is employed, in which case the end pins, b b, may be dispensed with; but for a felt blanket the arrangement shown is preferred. Ordinarily three or four of these rollers will be required in a machine.

The operation of the device is as follows: As the blanket felt is caused to pass over the guide-rollers any deviation from a straight course, in which it travels, throws a preponderance of weight to that side and causes the roller to vibrate upon its pivot and pins up and down, forward and back, until the blanket automatically assumes its central trend or travel and a proper adjustment to its true course is had, the inclined pins, c c, acting as a guide to the movements of the roller and roller-frame, and thus it will be seen that the side of the blanket will be prevented from curling up or buckling.

The claims cover the combination of the movable guide-roller B', journaled in bearings C on the frame B, with the central pivot, D, pins a c, and guide-pins b.

(229,636.)

Improvements in the Production of Ammonia.

A nitrate or a nitrite—by preference nitrate of baryta or of potash—is heated in a retort of the gases, products of decomposition are brought in contact with the vapor of water in another heated retort filled with coals. Here the nitrogen and the hydrogen, set at liberty, combine and form ammonia. This process may be worked with a single retort if the nitrate which is to be decomposed is mixed with hydrate of potash and carbon. In this case an alkaline bicarbonate remains in the retort. The base which remains in the first retort may be restored to the state of a nitrate or nitrite. For this purpose it is brought in contact with nitrogen and oxygen under the influence of electricity. The operation takes place in an earthen vessel, containing, for instance, baryta, into which the air and the oxygen are introduced by two tubes, while two other apertures give access to the polar wires. The vessel may thus contain merely air and the necessary excess of oxygen, and the vapors formed by the electric current may be passed directly into the decomposition retort, where steam arrives at the same time.

In another process ammonia is obtained by means of atmospheric nitrogen and watery vapor under the influence of electricity. The apparatus employed for this purpose consists of a retort containing ignited coke, into which is passed watery vapor. The gas (hydrogen) is drawn out by means of a pump, and compressed in a reservoir, where, after being cooled, it may be purified. The gases of combustion derived from heating the retort are driven by a pump into another reservoir where the carbonic acid is absorbed by lime. From these two reservoirs the nitrogen and hydrogen are led into a chest, where they are intimately mixed by a spiral wheel, set in motion by the gaseous current. At the bottom of the chest is fixed a glass tube containing wires, between which electric sparks play. A cock fixed at the end of the tube serves to regulate the flow of the gas, and the ammonia formed is absorbed by any known means.—*Moniteur des Produits Chimiques.*

The Paper Trade in the City of New York.

[Continued.]

It is worth the reader's while to turn aside for a moment at this stage of the history of the paper trade in the city of New York, from the limited range of individuals and firms to a general survey of the paper trade of the country. The United States is, by long odds, the largest paper producing country in the world. The latest comparison available at this writing is based on the production of the year 1873. Then the product of the United States was 535,000,000 pounds against 1,485,800,000 pounds in the other countries of the world excepting China and Japan. The next largest producers were Germany and Great Britain, which produced 360,000,000 each. The product of Germany was in reality, however, somewhat larger than that of Great Britain, as the German pound contains about three ounces more than the English pound. The value of the American product was

\$66,505,825 against \$48,436,665 in 1870, \$21,198,802 in 1890, and \$10,187,177 in 1895. Thus the industry had about sextupled in twenty-two years. Of the total in 1873 Massachusetts produced \$18,934,925; New York, \$10,118,830; Pennsylvania, \$7,616,375; Connecticut, \$5,871,443; Ohio, \$4,621,530; and the other States the remainder.

Perhaps no other product of home manufacture so completely excludes the foreign article. While the home production of raw paper was in 1873 only \$66,500,000 in value, the value of paper and articles manufactured therefrom imported into the United States was only \$1,619,909. In 1879 the imports had further dwindled down to \$1,186,382, by far the greater part of this sum being represented by articles manufactured from paper. The exports of paper and stationery from this country for the fiscal year ended June 30, 1880, aggregated \$1,183,140. The following statistics of the imports of paper into the United States from 1824, beyond which no records seem to have been kept, have been obtained for THE PAPER TRADE JOURNAL from the government archives in Washington. It may be added that the bulk of the imports was entered in the city of New York.

STATEMENT Showing the Value of the Paper and Manufactures thereof (blank books, &c.), Imported into the United States from 1824 to 1879:

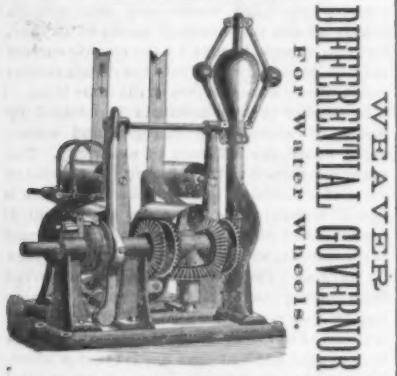
YEAR.	Value of Imports.	YEAR.	Value of Imports.
1824	\$68,060	1845	\$415,378
1825	206,184	1846	395,773
1826	245,920	1847	496,563
1827	44,241	1848	730,851
1828	182	1849	572,193
1829	84,238	1850	604,659
1830	110,408	1851	761,300
1831	312,994	1852	773,312
1832	136,555	1853	729,291
1833	63,098	1854	726,592
1834	90,696	1855	888,822
1835	103,892	1856	854,628
1836	152,701	1857	798,332
1837	77,189	1858	94,392
1838	125,071	1859	189,897
1839	85,666	1860	255,495
1840	71,009	1861	234,907
1841	60,193	1862	326,282
1842	48,097	1863	757,327
1843	14,460	1864	1,146,493
1844	44,608	1865	1,001,777
1845	52,734	1866	1,009,783
1846	77,434	1867	963,117
1847	34,609	1868	2,305,839

YEAR.	Paper.	Manufactures of Paper.	Total Value.
1873	\$591,612	\$1,086,357	\$1,619,969
1874	101,191	1,080,612	1,181,803
1875	391,281	1,228,698	1,619,979
1876	208,444	1,110,798	1,319,242
1877	334,429	1,073,692	1,380,121
1878	109,491	1,080,612	1,190,103
1879	135,487	1,311,138	1,446,625
1870	127,614	1,008,768	1,136,382

(To be Continued.)

R. B. BRIGGS,
—IMPORTER OF—
Paper Stock,
62 DUANE ST., NEW YORK.
Also, Sole Agent for
JOHN S. BRADFORD,
Cleington Steam Waste Works,
DUNDEE, SCOTLAND.

THE HARTFORD GOVERNOR CO.,
HARTFORD, CONN.
SOLE MANUFACTURERS OF THE



See description of Governor in Paper Trade Journal, page 308, June 12, 1880.

HOLYOKE WIRE WORKS,
Manufacturers of Foardriner Wires, Dandy Rolls and Cylinders.
SEAMLESS WOVEN AND LAID DANDY COVERS.
Designing, Monograms and Lettering of all descriptions done at short notice.
Cylinders Recovered and Repaired.
BUCHANAN, BOLT & CO.,
P. O. Box 463, HOLYOKE, MASS.

COHN, LAZARUS & CO.,
Hamburg, Germany, IMPORTERS OF New York, 253 Pearl St.
Rags and Paper Stock,
HAMBURG G PACKING,
Russian and German Rags.

R. A. LOEWENTHAL,
Broker and Commission Merchant,
WESTERN ASSORTED PAPER STOCK
STANDARD QUALITY.
62 Pine Street, New York.

CROCKER MANUFACTURING COMP'Y,
HOLYOKE, MASS.,
MANUFACTURE

White **BRISTOL BOARDS** Colored.
Colored Mediums and Book Papers.

OLD BERKSHIRE MILLS,
DALTON, MASS.

Old Berkshire Mills **LINEN LEDGER PAPER** Will stand the severest test of COLOR, CLIMATE, INK OR WEAR.

Being Triple Sized (a process entirely our own) and Left Dried, can be erased and written upon the fifth time distinctly.
None genuine without the water mark and date, thus—Old Berkshire Mills Linen Ledger, 1880.

Send for Samples, test them in comparison, and see that your books are made from paper thus water-marked.
CARSON & BROWN CO., Manufacturers.

THE HURLBUT PAPER COMP'Y,
SOUTH LEE, MASS.,
MANUFACTURERS OF

First-Class Card, Bristol, Envelope, Writing and Ledger Papers.

This Company exhibited their Manufactures at the "Centennial Exhibition," and were awarded a **DIPLOMA AND MEDAL.**

White **BRISTOL BOARDS** Tinted
(The Acknowledged Standard.)
—MANUFACTURED BY—

Z. CRANE, Jr., & BRO.,
DALTON, MASS.
Also, Extra First-Class Wedding Papers.
SAMPLES SENT ON APPLICATION.

EAST HARTFORD MANUFACTURING CO.,
Manufacturers of STRICTLY FIRST CLASS
Writing Papers,
Of all the regular Weights and Sizes, in Flat and Folded, Ruled and Plain.

Always on hand a full line of our Celebrated Brands of "Pequot Mills," "Charter Oak Mills," "Huron Mills" and "Nehantic Mills."
Orders for specialties in first class papers solicited. Samples and prices sent on application.

East Hartford Manufacturing Co., Burnside, Conn.

THE L. L. BROWN PAPER CO.,
—MANUFACTURERS OF FIRST-CLASS—

Bond, Pure Linen, Bank-Ledger and Record Papers, Flat Caps, Folios, Crown, Demy, Medium, Royal, Super-Royal, Imperial, Double-Demy, Double-Medium, Double-Royal, Elephant, Colombier, Atlas, Double-Elephant, Antiquarian.

For Samples, &c., address THE L. L. BROWN PAPER COMPANY, South Adams, Mass.
PRODUCT, TWELVE TONS PER DAY.

WHITING PAPER CO.
HOLYOKE, MASS.,
MANUFACTURERS OF

White, Cream, and Tinted Double Folios, Satin or Antique finish. Machine, Hand-made, and Linen Papers, Cream and Azure.
Ledger and Record Papers of superior strength and quality. Antique Parchment Papers.
Colored Folios, in all the regular weights, and in a full assortment of tints. Quadrille and Fine Lined Papers, similar to French, but of better quality.
Fine and Superfine White Flat Papers, in Cap, Double Cap, Demy, Medium, and all regular sizes and weights. Note and Letter Papers, wove or laid (ruled or plain), of the finest qualities desired for any purpose.
Bristol Boards in all qualities and tints.

MAGARGE & GREEN,
Commission Paper Warehouse,
PHILADELPHIA, PA.
Correspondence solicited with Manufacturers of Book, News and Manilla Papers.

J. G. DITMAN & CO.,
PAPER MANUFACTURERS AND DEALERS IN ALL KINDS OF
BOOK, NEWS PAPERS OR FLAT.

Required by Book Publishers, Newspapers, Printers, Manufacturing Stationers, Blank Book Makers, Lithographers. Send for Catalogue and Price List.
WISSAHICKON, MANAYUNK AND YORK MILLS. 30, 32 & 34 South Sixth Street, Philadelphia.

GEO. R. DICKINSON, J. E. CLARK,
DICKINSON & CLARK PAPER CO.,
HOLYOKE, MASS.,
—MANUFACTURERS OF—

Machine Super-Calendered Book & Envelope Papers and Engine-Sized Flats.
Correspondence Solicited. Samples on Application.

THOMPSON & RICHARDS,
FONDA, N. Y.,

Tobacco, Blue Seidlitz & Manilla Papers
A SPECIALTY.

MONTAGUE PAPER COMP'Y
Turner's Falls, Mass.
MANUFACTURERS OF ALL GRADES OF PRINTING PAPER.
A Specialty is Made of Roll Paper for Perfecting Presses.

—ALSO MANUFACTURERS OF—
WOOD PULP
For News and Manilla Papers.

HARDING PAPER CO.,
MIDDLETOWN, OHIO,
—Manufacturers—

FLAT AND RULED WRITING PAPERS.
SPECIAL CREAM LINENS AND PARCHMENT PAPERS
For Legal Blanks.
There are no better standard lines of Flat and Ruled Papers made than at these mills

SMITH PAPER CO.,
LEE, MASS.,
MANUFACTURE BOOK, NEWS AND MANILLA
PAPERS
We also Manufacture a Superior Quality of Wood Pulp.

HOLYOKE PAPER CO.,
HOLYOKE, MASS.
Organized in 1857 with a daily capacity of One Ton. Present daily capacity, Seven Tons of Superior Animal-Sized and Left-Dried Writing Papers.
AMONG OUR SPECIALTIES ARE THE CELEBRATED
AMERICAN LINEN PAPERS,
FLAT AND FOLDED, BOTH HIGH PLATE AND MILL FINISH.
BANKERS' PARCHMENT, Flat and Folded. First-class LEDGER PAPERS, all weights and sizes, equal to any in the market.
O. H. GREENLEAF, Pres., HOLYOKE PAPER CO.

NEWTON PAPER COMP'Y, **CHEMICAL PAPER CO.**
MANUFACTURERS OF PATENT BLUE LINED SUPERFINE MANILLAS,

Corrugated Carpet Felts, Tag and Box Papers, Heavy Manilla and Bogus Wrapping, ROPE AND PRINT PAPERS.
ROBIN-SIZED AND DRY SHEATHING. —ALSO—
Manilla-Lined Straw Board. CARD-MIDDLE AND TISSUE PAPERS.

MILLS AT HOLYOKE, MASS.
R. H. SMITH, Agent, MOSES NEWTON, Treas., I. S. DILLINGHAM, Agent,
No. 140 Nassau St., New York. Holyoke, Mass. 79 Milk Street, Boston, Mass.

THE ECONOMIC DOUBLE ACTING PUMP
Simple in its Construction. Economical in its Operation.
Made Interchangeable in all of its Working Parts.
SEND FOR CIRCULAR.
I. B. DAVIS, Maker, . . HARTFORD, CONN.



Correspondence.

Holyoke Notes.

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, MASS., November 4, 1880.

Well, the election is over, and people in this part of the country are pretty well satisfied. Above the pride or chagrin, caused by the partisan spirit, is the feeling of security which is occasioned by the decisive result. The excitement will soon die out, and the business of the country can proceed without fear of any more political interruption.

The Water Power Company has just published in a neat pamphlet, the results of the extensive turbine wheel tests which have been made at its flume during the past year. The book contains illustrations of the flume while various tests were in progress and cuts of a large number of the wheels. The tests were made, as far as the mechanical superintendence was concerned, by James Emerson, who had had much previous experience. But most of them were watched by Engineer T. G. Ellis, of Hartford, Conn., or by Engineer Samuel Webber, of Manchester, N. H., and some of them by both. Mr. Emerson's figures have been verified by the engineers. I understand that the book can be had by any one interested in the subject on application to the Water Power Company. The results include a mass of figures rather puzzling to the uninitiated, but interesting to the turbine builders and to manufacturers who use water power. It is rightfully remarked that the tests are only for the individual wheels on trial, and that they cannot be taken as conclusive evidence of what other specimens of the same make would give. It is one of the curious facts about the business that no turbine maker can be sure of producing two wheels of uniform efficiency. One may give high results and another, made apparently just like it, may fail badly. The company arrives at the conclusion that the greatest advance has been made in the direction of efficiency between half and full gate; and this is where advance will be of most service, for very few privileges give a supply of water to be used with economy at full gate. The tendency is to save water, and so a wheel which is most efficient at partial gate is the best. The book gives also the results of some experiments with draft-tubes and with gears and belts, the latter being to determine the loss of power by transmission. The figures show a great proportionate loss with spur gears, and in the tests with draft-tubes the advantage is on the side of wheels placed at the bottom of the flume.

I met the other day the brother of E. J. Blackmer, the poor man who was killed at the explosion of the bleaching boiler at George Robertson & Son's paper mill at Hinsdale, N. H., last Friday. He had just come from the scene of the accident and said that the proprietors attributed the explosion to a defect in the construction of the boiler, although there was some suggestion of an accumulation of gas, such as sometimes causes the explosion of ordinary boilers. Mr. Blackmer's body was found out in the bed of the river, and one end of the boiler was carried across the river. The main building was also blown to pieces and the roof of the machine-room torn off. A large piece of iron was hurled against one of the heating boilers, which was thrown entirely from its setting; but if this had not been in the way the huge missile would probably have entered the office, where young Mr. Robertson was seated. Four employees, named James Barry, William Royce, Edward Dorson and George Leland, were slightly injured. The loss is estimated at from \$15,000 to \$30,000, and as there is no insurance for this kind of an accident, it will be worse for Mr. Robertson than the fires which he has before suffered from. Still, preparations have already been begun for rebuilding the mill. The Mr. Blackmer with whom I conversed is an old paper maker, and he said he had never but once before heard of a bleach exploding. There is not generally enough steam in them to force them open; but this accident will make mill-owners more cautious.

The postal-card agency finds business increasing rapidly. The shipments of last month amounted to 40,948,000 one cent cards, and 16,000 internationals. The largest previous month was January of this year, when 36,488,500 were sent, and the number in October, 1879, was 35,310,000. This shows that the business of the country is growing very fast.

The water is still abundant in the river, as we have had another good rain. All of the paper mills are on the jump now, making every pound of paper possible to catch up with their orders. If the river continues as at present, or gets fuller, as it no doubt will, the mills will push production all winter without much fear of crowding the market, always having the possibility of another dry season. The prices have not changed in fine papers, and the engine-sized generally retain the same list, although I have heard that good book paper has been forced up a cent a pound. If the summer's production had not been limited by low water the schedule of prices would not probably have been maintained.

Of course, the new stir among the mills makes the stock dealers happy. Their sales have been pretty light for the past two months, the manufacturers not wanting to fill up till they were assured of a steady run for the winter. But now the drought seems to be really broken and there is not much excuse for refusing to buy. Jules Lugnot and A. Seguin, French paper makers, have been visiting the city this week and inspecting the mills and their peculiar features.

Robert McCann has again connected himself with Owen Keenan's Son, by whom he was formerly employed for a number of years.

Owing to the uncertainty of water-power at Loudville, Northampton, Mass., a steam engine has been set up at Loud's paper mill.

PURE, NATURAL Lubricating Oil FOR PAPER MILLS.

This oil has been extensively used by Paper Manufacturers throughout the United States for several years, giving in all cases perfect satisfaction. It is a pure, dark mineral oil, prepared without heating, perfectly free from anything injurious to machinery; wears as well as lard oil, and does not gum or chill in cold weather. Send for sample barrel. Price, 50 cents per gallon. The following are some of the manufacturers who have used this oil for several years, and to whom reference can be made: Cleveland Paper Co., Cleveland, O.; C. R. Markle & Sons, Pittsburg, Pa.; Rochester Paper Co., Rochester, N. Y.; John Hoyt & Co., Manchester, N. H.; Riverside Paper Co., Holyoke, Mass., &c., &c. Produced and manufactured by

GEO. ALLEN, Franklin, Pa.

OHIO FELTS

FOURDRINIER AND CYLINDER WET FELTS,

Press Felts and Jackets,

MANUFACTURED BY

SHULER & BENNINGHOFFEN, Hamilton, Ohio.

Grinding Mills

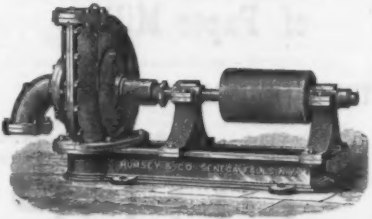
FOR GRINDING WET and DRY WOOD (AND MINERAL) PULP.



Send for Descriptive Circular to MUNSON BROS., Manuf'rs, UTICA, N. Y.

RUMSEY & CO. (LIMITED).

Seneca Falls, - - - New York, MANUFACTURERS OF Over 800 Different Styles of Pumps, Also Fire Engines, &c., &c.



Ask for RUMSEY'S PUMPS. And address for Catalogue and full information, RUMSEY & CO., Seneca Falls, N. Y.

TAKE THE



No other line runs Three Through Passenger Trains Daily between Chicago, Council Bluffs, Omaha, Lincoln, St. Joseph, Atchison, Topeka, Kansas City, and all points in Kansas, Nebraska, Colorado, Wyoming, Montana, Nevada, Arizona, Idaho and California.

The Shortest, Speediest and most comfortable route via Hannibal to Ft. Scott, Denison, Dallas, Houston, Austin, San Antonio, Galveston, and all points in Texas. Pullman 16-wheel Palace Sleeping Cars, C. B. & Q. Palace Drawing-Room Cars, with Horton's Reclining Chairs. No Extra Charge for seats in Reclining Chairs. The FAMOUS C. B. & Q. Palace Dining Cars. Steel Rail Tracks and Superior Equipment, combined with their Great Through Car Arrangement, makes this, above all others, the favorite route to the South, Southwest and the Far West.

Try it, and you will find traveling a luxury instead of a discomfort. All information about Rates of Fare, Sleeping Car Accommodations, and Time Tables, will be cheerfully given by applying to JAMES R. WOOD, General Passenger Agent, Chicago, C. W. SMITH, Traffic Manager.

Merrill & Houston Iron Works, BELOIT, WIS., MANUFACTURERS OF

Cylinder and Fourdrinier PAPER MACHINES,

Beater Engines, Rag Cutters, Paper Cutters, Pumps, Shafting, Pulleys, Hangers, &c.

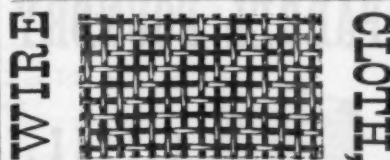
CHILLED ROLLS,

Guaranteed equal to any made. Plans and Estimates furnished, and special attention given to the execution of contracts for the entire machinery necessary to make any kind of Paper, set up, ready to run.

Calenders and Press Rolls reground by special machinery.

The attention of Water-power Users desiring the highest efficiency is especially directed to the

HOUSTON TURBINE WATER WHEEL,



Of Iron, Steel, Copper and Brass, for Paper and Flouring Mills, Breweries and Mining. Steel-tempered Wire Cloth for Bolting purposes. Wire Counter Office Railings, Wrought Iron Fencing, Wire Signs, Weather Vanes, and Wire and Iron work generally, manufactured. E. T. Barnum's Wire & Iron Works, Detroit, Mich.

Chicago Rubber Stamp Works, S. HOLDENESS & CO., PROP., 133 East Madison St., Chicago. Manufacturers of Self-Inking Pocket Stamps, Hand Printing Stamps, Self-Inking Stamps, Dating Stamps, PRINTING WHEELS, Name Stamps, and every variety of Rubber Stamps. Send for Catalogue and Price List.

JAMES LANEY & CO., Established 1864.



Wholesale Dealers in Cotton and Woolen Rags and Wrapping Papers. Office and Salesroom, 1 Elm, near Main; Warehouse, 1 Elm; Warehouse, 5 Lancaster, Rochester, N. Y.

BOLLINGER'S NEW Turbine Water Wheel AND Mill Machinery of all kinds

Thirty-three years' practical experience in constructing mills and mill machinery. Illustrated pamphlet, containing important challenges, free. Address O. J. BOLLINGER, York, Pa.

WOLF'S "Improved Eureka" Turbine,

Tested at Holyoke, Feb., 1877, and gave the following results:

GATE.	PERCENTAGE.
Full.	.8436
3/4	.8416
1/2	.8388
1/4	.8023
1/8	.6777
Average from full gate to 1/8	.839834
to 1/8	.7967

Proving itself the best Wheel for variable quantities of water in existence.

Over 500 in use. Stands unequalled in design, finish and strength.

Steam Engines, with Eikenberry's patent valve, perfectly adapted for mills.

Gearing.—We have GLEASON'S PATENT Gear Cutters, and furnish perfect gearing, wood and iron.

Pulleys and Shafting of standard style, size and finish.

Will furnish plans, and contract to remodel old mills or build new ones.

For descriptive pamphlets and further information, address

W. H. BARBER & BRO., Allentown, Pa.

No Boiler Explosions!

Those who have unsafe Rotary Boilers in use can exchange them for the Loring Patent Rotary, and can be furnished with abundant evidence that the Loring Boiler is absolutely safe, and the only safe Rotary Bleaching Boiler in use. For the production of chemically prepared wood-pulp it has been found extremely difficult to make a boiler that would remain absolutely tight for any considerable length of time. I have accomplished this result by adopting modes of construction far in advance of the best methods for producing first class boiler work. The common steam boilers built by the undersigned have proved more durable and safer than those of any other manufacturer in the United States who has been in the business the same length of time. Steam boilers, now in good condition, that have been in constant use twenty-eight years, can still be seen in use in Boston. Not one of the many thousand boilers, varying in weight from one-half to forty tons, has ever exploded or given out, to cause injury to a single person or to one dollar's worth of property, during the twenty-eight years. Persons in want of Rag, Rotary, Wood-Pulp, or Steam Boilers, will, on application to the undersigned, receive prompt attention.

HARRISON LORING, Boston, Mass.

NOTICE.—I have been informed that irresponsible boiler-makers have offered to build Rotary Boilers with whole wrought-iron heads and a hollow journal, which would be an infringement of my patent. Such boilers will be made by the undersigned at very reasonable prices, and no extra charge made for the patent right, which would have to be paid by the user if made by an unauthorized person.

HARRISON LORING.

INCORPORATED 1845.

LOWELL MACHINE SHOP, LOWELL, MASS.

CAPITAL, - - - - \$600,000.

WILLIAM A. BURKE, Treasurer, No. 8 Pemberton Square, BOSTON.

CHARLES L. HILDRETH, Supt., LOWELL.

MANUFACTURERS OF

PAPER MACHINERY.

VIZ: Light and Heavy Rag Cutters, with or without Feed; Gun Metal Rolls; Board Machines and Calenders; Fan and Stuff Pumps; Stacks of Chilled Rolls for Machines; Web and Sheet Calenders, with four to ten Chilled Iron and Paper Rolls; Hydraulic Presses, 50 to 1,300 tons; Plate Calenders; Stop Cutters; Trimming Presses; Plans of Mills, &c., &c.

DUTTON & SCHENCK,

—Importers and Dealers in—

Paper Stock and Manufacturers' Supplies,

ALSO AGENTS FOR THE

EUREKA FELTS and GLENS FALLS LIME.

No. 21 FEDERAL STREET, BOSTON, MASS.

JARVIS PATENT FURNACE

FOR SETTING

Steam Boilers

AND SODA ASH RECLAIMERS.

Economy in Fuel and Increased Capacity. Burns all kinds of Cheap Fuel without blast.

—ALSO AGENT FOR THE—

LAWRENCE ENGINE,

The Best High-Speed, Direct-Acting Stationary Engine.

Send for Circular.] A. F. UPTON, Agent, No. 7 Oliver St., Boston.

BELT HOOKS.

The Best Metallic Belt Hook in the Market or LEATHER, RUBBER OR CANVAS BELTS.

These Hooks have been thoroughly tried for eleven years in the leading Paper Mills of this Country, and all who use them admit that they are the best and cheapest fastening in use. They act on the same principle as pegging on the sole of the boot. The teeth taking the place of pegs, the belt is not weakened by punching holes; and the teeth, taking hold in so many places, the strain comes more uniformly on the ends of the belt, which prevents tearing out the ends. Descriptive Circulars and Price Lists to be had on application.

W. O. TALCOTT, Proprietor and Sole Manufacturer, P. O. Box 630, PROVIDENCE, R. I.

In sending for samples, please state width and thickness of belting.

SAMPLE HOOKS SENT GRATIS UPON APPLICATION.

MEAD & NIXON PAPER CO., DAYTON, OHIO.

PAPERS BOOK, NEWS PAPERS

Also PURE CHEMICAL WOOD FIBRE.

ESTABLISHED 1829.

Porritt, Bro. & Austin,
STUBBINS VALE MILLS,
Ramsbottom, near Manchester,

MANUFACTURERS OF ALL DESCRIPTIONS OF

FELTS

Used by Paper-Makers.

SOLE AGENTS:

Messrs. H. C. HULBERT & CO.,
13 Beekman St., New York.

SECOND TO NONE.

TRADE MARK

THOROUGH.

Philadelphia, 1876.



THE ONLY PRIZE MEDALS AWARDED

FOR ASSORTMENT and CUTTING

OF RAGS AND WASTE PAPERS.

Paris, 1878.



John Pfeffer & Co.,

GHEENT.

Chief Works, - BELGIUM.
ALSO, PARIS, LONDON, BRUGES.

CUT RAGS

Seamed and Dusted Ready for Use.

SPECIAL ASSORTMENT

Waste Papers

AND BAGGING.

Absolute Uniformity Guaranteed.

NEW YORK AGENTS:

Messrs. LEE & STURGES,
23 Beekman Street.

J. CURRIE & CO.,

Albert Street, Little Walk, Edinburgh
AND West Port Dundee

DEALERS IN AND EXPORTERS OF

-All kinds of-

PAPER STOCK,

Cotton and Woolen Rags, Waste Papers,

Bagging and Ropes.

SPECIALTY:

FLAX and JUTE WASTES.

ELASTIC JOINT

IRON ROOFING.

Manufactured and sold by us in all parts of the country, from Texas to Minnesota for the past

EIGHTEEN YEARS. Boxed ready for shipping.

ORDERS Promptly Filled. Caldwell & Co., 130 W. Second St. CINCINNATI. Send for Circular.



FIRE, WIND Water Proof Roof Easily Applied. Construction and Expenses fully provided for. No labor, as built through the Roofing m. Explaining and required.

ESPARTO Paper Stock

(ROUTLEDGE'S PATENT),

Unbleached or Bleached, ready for the Potcher Engine.

MANUFACTURED BY

FORD WORKS CO.

(LIMITED),

Sunderland, England.

Prices, Samples and Particulars post free on application.

J. JACOBSON & CO.,

3 Ohestrasse,

HANOVER,

SORTERS, PACKERS AND SHIPPERS

OF

Trade **J. J. C.** Mark.

Linen, Cotton and Woolen

RAGS,

Jute Bagging & Wastepapers,

Carefully and Cleanly Assorted.

JAS. KENYON & SON

Derby Street Mills,

BURY,

Lancashire, . . . ENGLAND.

MANUFACTURERS OF

FELTS

FOR

PAPER MAKERS.

COUCH ROLL COVERS,

WET and DRY FELTS

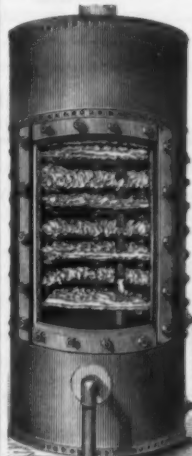
OF ALL KINDS.

Agents in United States:

MOREY & CO., - BOSTON.

S. G. TRAIN, BOSTON.

STILWELL'S PATENT



Lime-Extracting Heater and Filter Combined.

Is the only Lime Extracting heater that will prevent scale in steam boilers, removing all impurities from the water before it enters the boiler. Thoroughly tested. Over

3,000

of them in daily use.

This cut is a fac-simile of the appearance of a No 5 Heater at work on ordinary lime water when the door was removed after the Heater had been running two weeks. Illustrated Catalogues.

Stillwell & Bierce Mfg. Co., DAYTON, OHIO.



MERCER'S Reliable TURBINE

WATER-WHEEL.

The simplest and most durable Wheel in use, and gives as high a per cent. of power as any other Wheel manufactured. It is acknowledged the best part gate wheel on the market. Send for catalogue and price list.

T. B. MERCER, Christiansburg, Lancaster Co., Pa.

RUSSELL PAPER COMPANY,

- MANUFACTURERS OF -

BOOK, NEWS
- AND -
WRITING PAPERS.

- AND -

BLOTTING.

- ALSO -

CHEMICAL WOOD PULP

LAWRENCE, MASS.

FARREL FOUNDRY AND MACHINE CO.,

ANSONIA, CONN.

The Largest Makers in the world of

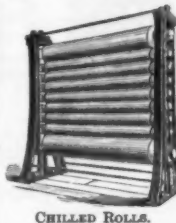
CHILLED ROLLS,

FOR PAPER.

ALSO,

CHILLED AND DRY SAND ROLLS,

FOR ALL OTHER PURPOSES.



CHILLED ROLLS.

All our Rolls are ground by the Poole Grinder, which guarantees their perfectness and finish.

Old Rolls Reground at Short Notice.

PAPER MANUFACTURERS, ATTENTION!

THE COPE & MAXWELL MFG. CO.

OF HAMILTON, OHIO,

Are prepared to furnish you their New and Improved

STEAM FIRE PUMPS.

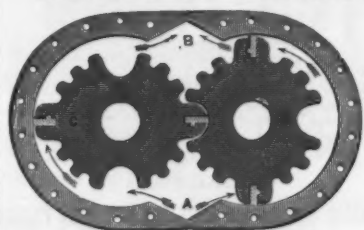
Steam Pumps for raising water or liquids for all purposes. Power Pumps, to be driven by belt or gearing.

Independent Boiler Supply Pumps, Vertical or Horizontal, Piston or Plunger Pattern. Send for Illustrated Descriptive Circular and Prices.



HOLLY'S PATENT ROTARY PUMPS,

Arranged for Power, Steam or Hand.



Particularly adapted for use of Paper Mills.

- BUILT BY -

THE SILSBY MANUFACTURING CO.,

Seneca Falls, N. Y.

PEARL PULP,

- MANUFACTURED BY -

E. P. CHAPIN,

Manufacturer, Importer and Dealer in Paper-Makers' Supplies,
SPRINGFIELD, MASS.

This material is being used by many of the leading Paper Makers, and gives entire satisfaction. As a filling it has no equal. It can be used freely in the finest grades of Paper without injuring the quality.

It mingles with the Rag Pulp and becomes a part of the Paper, and cannot be detected without submitting the Paper to a chemical test, while other makeweights, such as Clay, Terra Alba (or Silesian White, as it is sometimes called), and other ground stone and granular material, if used in any quantity, will lower the quality of the Paper and can easily be detected.

EDSON'S RECORDING GAUGE.

Indispensable for PAPER MAKERS using Steam for Drying, Bleaching, &c.

Also applicable for Water Works, for Recording Pressure of

Water in Reservoirs, Mains, &c., &c.

A GONG is caused to ring in the engine room, by electricity, when the limit of pressure is reached. These Gauges have been in use for years in many of the leading paper mills, with most satisfactory results. References given and pamphlets furnished by

M. B. EDSON, 91 Liberty St., New York.

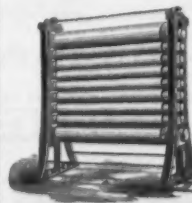
BLACK & CLAWSON,

Hamilton, Ohio,

MANUFACTURERS OF

PAPER MACHINERY

OF EVERY DESCRIPTION.



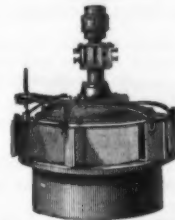
FOURDRINER and CYLINDER Machines, Plunger and Fan Pumps, Rag Cutters, CHILLED ROLLS. Rolls reground in the most approved manner. Special attention given to covering Press Rolls with GUN METAL and the manufacture of Gun Metal COUCH ROLLS.

Also Manufacturers of a New Patent Machine for Turning Wooden Press Rolls.

STOUT, MILLS & TEMPLE,

MANUFACTURERS OF THE

AMERICAN TURBINE



Water Wheel,

GEARING AND SHAFTING.

Rag Engines,
Wood or Iron Tubs,
Rag Cutters,
Dusters,
Pumps, &c.

THE AMERICAN TURBINE, as recently improved, utilizes a higher average percentage of power than any Turbine ever known, which justly entitles it to the position claimed for it as the BEST Water Wheel in the world.

Large Illustrated Catalogue sent free on application to

STOUT, MILLS & TEMPLE,
DAYTON, OHIO.

- PURE -

Chemical

WOOD FIBRE

SUITABLE FOR

Fine News, Book and Writing Papers.

DRY IN ROLLS.

Manufactured and for Sale by

The American Wood Paper Co.

For Samples and Terms apply to

E. EMBREE, Agent,

P. O. Box 4667. 140 Nassau St., New York.

The Empire Felts.

FOURDRINER & CYLINDER

Wet and Press Felts,

JACKETING,

Strainer Cloth and Roller Cloth,

MANUFACTURED BY

F. C. HUYCK & CO.,

At the Kenwood Mills,

ALBANY, N. Y.

(Formerly of Rensselaerville, N. Y.)

All Grades and Sizes kept in Stock.

Orders promptly filled.

Entire Satisfaction Guaranteed.

Will send Price List upon application.

WATERBURY

AND

Empire Felts.

Old, Tried, Reliable.

MANUFACTURED BY

H. WATERBURY & SONS,

Oriskany, Oneida Co., N. Y.

Price Lists sent on application.

DIRECTORY.

Cards under this heading will be charged for at rate of \$15 per annum for each card.

NEW YORK HOUSES.

Jute Butt Brokers. BEEBE, IRA L., 44 & 46 Duane st., N. Y. CABOT, BOWLES & CO., 81 Water st. CROCKER, HENRY H. & CO., 134 Pearl st., N. Y. DALAND, WILLIAM S., 124 Water st., N. Y. GEORGE W. TILTON, Bagging and Paper Stock of all kinds. 97 & 99 Water Street, N. Y. MOSES & COHEN, 105 Water st. Special attention paid to buyers' interests in purchasing and shipping. TUCKERMAN, G., 72 Beaver st., N. Y.

Machinery Oils.

NEW YORK LUBRICATING CO., 136 Maiden lane. Lubricating Oils and Compound for Paper Mills.

Note Broker.

COLBY, C. A., Buys and Sells Notes of Paper Manufacturers and Dealers, 22 Nassau st., N. Y.

Paper and Paper-Makers' Supplies.

BARRETT, THOMAS, 85 Centre st., N. Y. BENEDICT & HIGGETT, 118 William st. BUTLER & JOHNSON, Dealers in Paper, 44 Beekman street, N. Y. ELY, EUGENE & SON, Dealers in Paper Stock, 85 Cliff st., N. Y. FLEMING, MILLER & USSING, 71 John st., N. Y. HARD, MELVIN & SON, 25 Beekman st. HEWITT, C. B., & BRO., 48 Beekman st. HOWE & DIECKMANN, No. 80 Walker st., N. Y. HUBBS & LAMB, 36 Beekman st., N. Y. HULBERT, H. C., & CO., 13 Beekman st. MURPHY, JOHN J., 47 John and 5 Dutch sts. PERKINS & GOODWIN, 84 Duane st. WATSON, GEORGE, JR., 63 Beekman st.

Paper-Makers.

HAND & ELSWORTH, White and Colored Tissue and Copying Paper, at Peekskill, N. Y. Paper Warehouse and office, 51 Beekman st., N. Y. ORRS & CO., Printing and Hanging Mills at Troy, Office, 39 Park Row, New York.

Paper-Makers' Chemicals and Colors.

HELLER & MERZ, Ultramarine, 55 Maiden lane, N. Y. RIKER, J. L. & D. S., 45 Cedar st. SERGEANT BROS., 78 William st., N. Y.

Printed Wrapping Paper.

NUGENT & STEVES, Also Paper Bags and Boxes, 538 and 540 Pearl st., N. Y.

Rags and Paper Stock.

ATTEBURY BROS., 253 & 255 Front st. BRIGGS, R. B., 12 Reade st. BUCHANAN, M. T., 279 Front st. COHN, LAZARUS & CO., 253 Pearl st., N. Y. CORRIGAN, PATRICK, 700 Second ave., N. Y. DALY, DANIEL, 386 Water st., N. Y. DAMERY, JAMES, 251 & 259 Front st., N. Y. EVANS, T. J., N. W. Corner Frankfort and William sts., N. Y. FITZGERALD, JAMES M., & CO., Paper and Paper Stock, 137 South Fifth ave., N. Y. GILDEA, PATRICK, 445 and 447 West 13th st. HARLEY, GEORGE, 362, 365 & 367 Third st., N. Y. KEENAN'S, OWEN, SON, Established 1840, 448 Pearl st., N. Y. KENDALL BROS. & GODDARD, 66 John st., cor. William, N. Y. LIBMANN, JOSEPH, & CO., New Rags a Specialty, 3 Howard st., N. Y. LYON, J. W., & CO., 35 Park st. MAHARIN, M. A., Metals, 513 Washington st. McQUADE, ARTHUR J., Foreign & Domestic Woolen and Cotton Rags, 535 & 537 E. 13th st., N. Y. O'MEARA, M., 27 Centre st. PFLUGNER, J. C., Cotton and Woolen Rags, 401 and 406 West Forty-first street. RING, M. A., & SONS, (413 Atlantic ave., Boston, 139 North Front st., Philadelphia), 534 Pearl st., N. Y. SAVAGE, JAMES, 386 & 388 Seventh ave., N. Y. SERGEANT BROS., 78 William st., N. Y. SMITH, JAMES F., Jute Waste, Bagging and Rope, 36 Peck slip, N. Y. SMITH, THOMAS, 30 Hester st. TAYLOR, M. A., Paper and Paper Stock, 398 Broome st., N. Y. TAYLOR, E. W., Packer of the celebrated Brand Diamond T. Rags, 8 and 10 Reade st., N. Y. WARD, OWEN, 448 & 450 West 39th st.

Straw Boards.

BUTTERFIELD, H. A., 548 Pearl st., near Broadway. HAYES, JAMES E. & CO., 75 Duane st.

Wire Cloth.

LANG, MARIUS, Importer of Wire Cloth, 94 Bleeker st., N. Y.

OUT OF TOWN HOUSES.

Binders' Boards.

SHEEDER, J. FRED., Mfr. of Album, Binders', Trunk and Button Boards, Kimberton, Pa. BARBER, J. & J. S., Paper Stock and Binders' Boards, 621 and 623 Commerce st., Philadelphia, Pa.

Dandy Roll Manufacturers.

CHENEY BIGELOW WIRE WORKS, Springfield, Mass. Pat. Seamless Wove and Laid Dandy Rolls.

Paper Bags and Flour Sacks.

BLOOMINGTON PAPER AND BAG CO., "Acme" Fische Bottom Bags, 38 & 40 La Salle st., Chicago, Ill. RIBBANS & CO., Wholesale Paper & Twine Warehouse, Paper Bags and Flour Sacks, Newark, N. J.

Paper-Cutters.

HOWARD IRON WORKS, Buffalo, N. Y.

Paper Makers' Chemicals and Colors.

BLANCHARD, J. HENRY, Chemicals and Wood Pulp, 16 Battery March st., Boston, Mass. MITCHELL, WM. H., 43 N. Front st., Philadelphia.

Paper-Making Machinery.

CUSHMAN, DWIGHT, Hartford, Conn. Manufacturer of Flume and Scroll Turbine Wheels. HOLYOKE STEAM BOILER WORKS, Manufacturer of Steam Boilers (B. F. MULLIN), Holyoke, Mass.

Paper Manufacturers.

JERSEY CITY PAPER CO., White and Colored Tissue and Manila Paper, 311 Wayne st., Jersey City, N. J. SCOTT PAPER CO. (Limited), 27 N. 6th st., Philadelphia. Flour Sack, Building & other Manila Papers.

Rags, Paper and Paper Stock.

BURR BROS., Importers and Dealers, 235 North Water st., Philadelphia, Pa. BUTLER, THOMAS, Dealer in Paper Stock, Woolen Rags, &c., 249 Causeway st., Boston, Mass.

COCHRAN & YOUNG, Paper Mfrs. and Wholesale Dealers in Cotton and Woolen Rags, Erie, Pa. DICKINSON & MAYO, Cotton Rags and Paper Stock, Springfield, Mass.

DORAN, A., Wholesale Dealer in Paper and Paper Stock, 6 & 8 Union st., Bridgeport, Conn. ERIE CITY RAG WAREHOUSE, 13 East Fifth st., Erie, Pa.

B. FELSETHAL & BROS., Paper Rags, Twine, Woolen & Cotton Rags, 156-160 S. Desplaines st., Chicago, Ill. Refer to J. W. Butler Paper Co.

FOLLANSBEE, TYLER & CO., 134 & 136 Quincy st., Chicago, Ill. Refer to J. W. Butler Paper Co.

FRANZEN & CO., Wholesale Dealers in Paper Stock, Cotton and Woolen Rags, Milwaukee, Wis.

GILBERT, Wm., & CO., Paper and Woolen Mfrs' Materials, 11 & 13 Market st., Chicago, Ill.

GRAHAM PAPER CO., Paper Warehouse and Stock Dealers, 217 & 219 No. Main st., St. Louis, Mo.

HARRIS, M. & BROS., 403 & 405 Fifth ave., Chicago, Ill. Branch Houses: Dubuque, Ia.; Burlington, Ia.

HARRISON, JAS., Wholesale Dealer in Paper, Paper-Makers' Material, Cot. & Woolen Rags, Pittsburg, Pa.

LANEY, JAMES, & CO., Dealer in Paper and Paper Stock, Cotton and Woolen Rags, Rochester, N. Y.

LOEWENTHAL BROS., Woolen Rags, Paper Stock, 10 & 12 No. Canal st., Chicago.

LOEWENTHAL, B., Dealer in Paper Stock and Woolen Rags, 51 W. Lake st., Chicago, Ill.

MCARDLE & HART, Cotton & Woolen Rags and Paper Stock, 250 & 291 West st., N. Y., & Newark, N. Y.

MARKLE, C. P. & SONS, Mfrs. of Printing and Glazed Hardware, 136 Second av., Pittsburg, Pa.

MAYER, A. B., Rags and Paper Stock Dealer, 1014, 1020 & 1022 N. Twelfth st., St. Louis, Mo.

McKEON, P. & J., Dealers in Woolen & Cotton Rags, &c., 205 and 207 North Second st., Brooklyn, E. D.

MOERS, E. M., Dealer in Old & New Metals, all kinds of Wool & Paper Stock, 20 E. 2d st., Cincinnati, O.

NATIONAL PAPER CO., Holyoke, Mass. Dealers in Paper and Paper Stock. Storage Warehouse.

RICHMOND & CO., F. H., Paper and Paper Stock Warehouse, Cotton Waste Dealers, Providence, R. I.

SNIDERS, LOUIS' SONS, Manufacturers and Wholesale Paper Dealers, 121 Walnut st., Cincinnati, O.

WINKLER, ISAAC, & BRO., Wholesale Dealers in Woolen Rags, Paper Stock, and Manufacturers' Supplies generally, 19 & 20 Main st., Cincinnati, O.

ELLIOT, A. G., Paper & Paper Stock, 727 Chestnut and 726 Jayne sts., Philadelphia.

SIMMONS, JOHN, Wholesale Dealer in Paper and Rags, 20 & 22 Decatur st., Philadelphia.

WALSH, D. J., & CO., 6 South Front st., Philadelphia. All kinds of Woolen Rags Bought for Cash.

Screen Plate Manufacturers and Repairers.

ANNANDALE SCREEN PLATE CO., Repairing Old Plates a Specialty. P. O. Box 309, Paterson, N. J. ASHMUN SCREEN PLATE CO., Old Plates renewed; charges moderate; P. O. Box 210, Paterson, N. J. JUDSON, HOWARD, 127 & 129 R. R. ave., Newark, N. J. Screen Plates Renewed by the New Process.

Straw Boards and Straw Wrapping.

BAUER, J. C. & CO., 127 N. 4th st., Philadelphia. Straw Boards, Colored Papers, &c. Lining a specialty. TUCKER'S, E. SONS, Straw Boards, Paper, Twines, Paper-Box Mach'y, 100 Trumbull st., Hartford, Ct.

FOREIGN HOUSES.

Rags and Paper Stock.

WALKER, J. R., Dealer in Paper Stock, Woolen Rags and Scrap Metals, 30 & 34 Foundling st., Montreal.

IMPORTATIONS OF PAPER STOCK, PAPER, BOOKS, CHEMICALS, &c.

IMPORTS of Paper and Paper Materials, Books, &c., at the Port of New York, for the week ended October 29, 1880. Quantity given in packages when not otherwise specified.

Table with columns for item name and quantity. Includes Aniline Colors, Alum, Aluminous Cake, Bleaching Powders, Soda Ash, Soda, Biocarb, Soda, Caustic, Soda, Sal, Ultramarine, Books, Newspapers, Engravings, Ink, Lead Pencils, Paper, Steel Pens, Stationery, Slate Pencils, Clay, Jute Butts, Jute Rejects and Cuttings, Paper Hangings, Paper Stock, Terra Alba, Waste, and Totals.

Table showing General Merchandise for the week ended October 29, 1880. Includes Paper, Paper Stock, &c. with quantities and values.

IMPORTS of Rags and Paper Stock at the Port of New York, since Jan. 1, 1880, from the following Ports, showing quantities from each Port.

Table with columns for Port, Rags, Paper Stock, and Manila Stock. Lists various international ports like Alexandria, Almeria, Amsterdam, Antwerp, Amoy, Aspinwall, Bermuda, Bremen, Bristol, Buenos Ayres, Calcutta, Cardiff, Catania, Copenhagen, Curacao, Dantz, Dundee, Glasgow, Genoa, Guantanamo, Hull, Hamburg, Havre, Hong Kong, Hongo, Hong Kong, Jamaica, Leith, Liban, London, Liverpool, Leghorn, Malta, Marseilles, Matanzas, Middleboro, Montevideo, Naples, Nassau, Newcastle, Newport, Odessa, Oporto, Para, Pilla, Point-a-Pitre, Port Elizabeth, Porto Rico, Rotterdam, Singapore, Stettin, Stockholm, Trieste, Tunis.

Special List of Imports of Paper Stock at the Port of New York for the month ended October 31, 1880.

Table with columns for item name, Rags, Old Papers, Manila, and Bales. Lists various paper stock items and their quantities.

EXPORTS of Paper, Books, &c., from the Port of New York to Foreign Ports for the week ended Nov. 3, 1880, with Aggregates and Values.

Table with columns for item name, Books, Cases, and Values. Lists various paper and book exports to different countries.

Table showing AGGREGATES AND VALUES for Paper, Paper Stock, &c. with quantities and values.

TOTAL REPORTS.

Table showing General Merchandise for the week ended Nov. 3, 1880. Includes Paper, Paper Stock, &c. with quantities and values.

NEW YORK IMPORTS.

FROM OCTOBER 27 TO NOVEMBER 3, 1880. Paper Stock. W. H. Parsons & Co., Bolivia, Glasgow, 16 ba. paper stock. J. C. O'Brien, The Queen, London, 169 ba. paper stock. Cohn, Lazarus & Co., The Queen, Liverpool, 66 ba. paper stock. W. H. Parsons & Co., by same, 39 ba. paper stock. J. W. Mason & Co., Spain, Liverpool, 303 ba. paper stock. P. Y. Fachiri, Carisbrooke Castle, Calcutta, 13 ba. paper stock. J. Colvin, J. Landier, Nassau, 5 ba. paper stock. Cohn, Lazarus & Co., Gamma, Hull, 2 ba. paper stock. Lee & Sturges, by same, 56 ba. paper stock. Bach Bros., Baltic, Liverpool, 136 ba. paper stock. Owen Keenan's Son, State of Georgia, Glasgow, 118 ba. paper stock. W. H. Parsons & Co., by same, 21 ba. paper stock. W. I. Clark, by same, 60 ba. paper stock. W. I. Clark, Philadelphia, Leghorn, 110 ba. paper stock. Munzinger & Pittipio, by same, 200 ba. paper stock. Fabri & Chauncey, by same, 175 ba. paper stock. H. M. Castle, by same, 300 ba. rags. Fabri & Chauncey, Egadi, Genoa, 4 ba. rags. Jos. Libmann & Co., Braunschweig, Bremen, 114 ba. paper stock. Cohn, Lazarus & Co., Otranto, Hull, 307 ba. paper stock. Henry Eggers, by same, 38 ba. paper stock. Geo. Watson, Jr., California, London, 134 ba. paper stock.

Paper. May Bros., Amerigo, Havre, 11 cs. cigarette. E. Kimpton, by same, 4 cs. Avery, Penabert & Co., by same, 3 cs. W. H. Schefflin & Co., by same, 5 cs. E. Susarte, Newport, Havana, 2 cs. cigarette. P. Fannely, Braunschweig, Bremen, 2 cs. colored. Henry Griffin & Son, Nederland, Antwerp, 3 cs. Keuffel & Esser, by same, 5 cs. R. Neumann, by same, 5 cs. C. Moller, Mosel, Bremen, 1 cs. H. Bainbridge & Co., by same, 12 cs. G. A. Shasty, by same, 6 cs. hangings. Kaufmann & Strauss, by same, 3 cs. colored.

BOSTON IMPORTS.

FROM OCTOBER 28 TO NOVEMBER 3, 1880, INCLUSIVE. [NOTE.—By order of the Treasury Department at Washington the names of importers of merchandise]

at this port are withheld from the press. Parties wishing their names to appear in the reports of imports will please communicate with J. Henry Blanchard, No. 36 Battery March street.—En.]

Books. Order, Massachusetts, Liverpool, 1 cs. C. Schoenhof, Samaria, Liverpool, 2 cs. Estes & Lauriat, by same, 3 cs. A. Williams & Co., by same, 1 cs. E. A. Snow, by same, 1 cs. Order, by same, 1 cs. Little, Brown & Co., by same, 2 cs. Order, by same, 1 cs. Order, by same, 1 cs. T. B. Noonan & Co., by same, 2 cs. Order, by same, 1 cs. C. W. Hooper, Atlas, Liverpool, 1 cs. Stone & Downer, Victoria, Liverpool, 5 cs.

Paper, &c. Gay & Wolf, Atlas, Liverpool, 1 cs. Dennison Manufacturing Company, Samaria, Liverpool, 5 cs. tissue. C. Reid & Co., by same, 1 cs. manufactured. A. P. Schmidt, by same, 3 cs. music. Order, Farthia, Liverpool, 4 cs. manufactured. H. Partridge & Co., Lepanto, Hull, 32 cs. albums.

Paper Stock.

Order, Cova Leaf, Publico, 14 ba. paper stock. Haskins & Montague, Worcester, Halifax, 3 ba. paper stock. Capt. Anderson, Kedron, Granville, 2 pkgs. paper stock. C. A. Cheney, Austrian, Glasgow, 130 ba. rags. W. I. Clark, by same, 136 ba. rags. Train, Smith & Co., by same, 364 ba. paper stock. Dutton & Schenck, by same, 106 ba. paper stock. Warren & Co., Minnesota, Liverpool, 70 ba. paper stock. Train, Smith & Co., by same, 94 ba. paper stock. H. M. Knowles, by same, 145 ba. paper stock, 57 ba. rags. Dutton & Schenck, by same, 225 ba. paper stock. Order, by same, 37 ba. paper stock. Train, Smith & Co., by same, 220 ba. paper stock. Dutton & Schenck, by same, 309 ba. paper stock.

Soda Ash.

Warren & Co., Victoria, Liverpool, 70 cs. Warren & Co., Minnesota, Liverpool, 350 cs. Warren & Co., Brazilian, Liverpool, 54 cs. Dutton & Schenck, Ilyrian, Liverpool, 100 cs. E. & T. King & Co., Lepanto, Newcastle, 44 cs.

Caustic Soda.

Warren & Co., Minnesota, Liverpool, 123 drums. Warren & Co., Brazilian, Liverpool, 100 drums.

Bleaching Powder.

Warren & Co., Victoria, Liverpool, 391 cs. Warren & Co., Minnesota, Liverpool, 432 cs. Warren & Co., Brazilian, Liverpool, 311 cs. J. L. & D. S. Riker, Ilyrian, Liverpool, 56 cs.

Aluminous Cake.

Rice, Kendall & Co., Lepanto, Hull, 19 cs. China Clay. H. M. Knowles, Peabody, Plymouth, England, 300 cs.

Venetian Red.

May, Nash & Winslow, Lepanto, Hull, 300 bbls. C. L. Andrews, Austrian, Glasgow, 40 bbls.

PHILADELPHIA IMPORTS.

Rags. Isaac Hough & Co., San Raffaele, Constantinople, 274 ba. rags. J. W. Lyon & Co., Hannah Blanchard, Hamburg, 219 ba. rags.

Soda Ash.

Brown Bros. & Co., Lord Gough, Liverpool, 85 cs. Order, by same, 64 cs. Caustic Soda. Cooper, Smith & Co., Lord Gough, Liverpool, 95 drums. Order, by same, 235 drums, 38 pkgs.

BALTIMORE IMPORTS.

Soda Ash. Order, Nova Scotia, Liverpool, 123 pkgs.



STAR CLAY COMPANY

OFFICE: LIMITED. WORKS: No. 220 South Second St., Mertztown, Berks County.

PHILADELPHIA, PA. PENNSYLVANIA.

MINERS AND MANUFACTURERS OF WHITE CHINA CLAY.

Especially adapted to Paper Makers' use. W. H. MITCHELL, Agent for New York and New England States, 43 N. Front St., Philadelphia.

SMITH, WINCHESTER & CO.,

South Windham, Conn., MANUFACTURERS OF—

PAPER MACHINERY,

CONSISTING OF

Fourdriner and Cylinder Machines. Washing and Beating Engines. Air-Drying Machinery for Drying Sized Papers. Sole Manufacturers of the Jordan Patent Beating Engine, which has no rival for clearing the stock for fine papers. Chilled Iron and Paper Roll Super Calenders. Plate Calenders, Chilled Roll Calenders, Box Cutters, Hand and Power Cutting Presses and Stop Cutters. The Hatch Patent Stop Cutter, the only Cutter that can be regulated to cut between water marks of writing papers. Screens, Brass and Nickel Flated, the latter warranted to wear twice as long as brass. Bed Plates, Roll Bars, Fan and Plunger Pumps. Also, Gun Metal Covered Rolls, for Size and Press Rolls. Stevenson Water Wheels. Shafting and Mill Gearing generally.

The Paper Trade Journal.

DEVOTED EXCLUSIVELY TO THE INTERESTS OF The American Paper Trade. Weekly, \$4.00 per annum.

Single Copies, 10 Cents

NEW YORK: SATURDAY, NOV. 6, 1880.

Advertisements cannot be received for insertion in the current week later than 9 A. M. on Friday. The charge for advertising is 25 cents a line, each insertion. Special terms for standing and displayed advertisements to be had on application. Card in Directory Column and one copy of paper, \$10 a year.

THE PAPER TRADE JOURNAL is the recognized organ of the various Paper-Makers' Associations of the United States.

THE JOURNAL contains the latest and fullest information relative to the paper trade in all parts of the world, including descriptions of new appliances and processes for making paper, experiments with new fibres and other materials, a record of the water supply, with the latest manufacturing news in all parts of the country. It gives the cream of all the foreign technical journals which relate to the paper interest, besides communications from competent persons in the trade, both at home and abroad. The market review and quotations show the state of trade in all the principal cities, and no pains have been spared to make these accurate and complete.

Subscription and postage for Great Britain, per annum, \$1. Subscription and postage for France, per annum, 25 francs. Subscription and postage for Germany, per annum, 34 reichsmark. Foreign subscribers may address our New York office.

Communications on matters of interest to the trade are earnestly solicited from all quarters, and if used will be liberally paid for. Items of news, and facts of all kinds in relation to the state of the mills, &c., will be gladly received.

All communications must be addressed to

HOWARD LOCKWOOD, Publisher and Proprietor, No. 74 Duane Street, N. Y.

BRANCH OFFICES.

Eastern Office: J. F. RIDAY, General Manager, 26 & 28 BROMFIELD STREET (Wesleyan Building), BOSTON, MASS.

Philadelphia Office: J. VIENNOT, General Manager, 407 WALNUT STREET.

Western Office: P. G. MONROE, General Manager, 6 LAKE SIDE BUILDING, CHICAGO, ILL.

FOREIGN GENERAL AGENTS.

- W. F. Catchside, 5 Ludgate Circus Building, London.
Elfwing & Co., Stockholm, Sweden.
John L. Sprague, Gibraltar, Spain.
Leonardo Fardio, Vigo, Spain.
S. H. Haine, Antwerp, Belgium.
G. Galvagno, Turin, Italy.
B. Bernard, Venice and Florence, Italy.
U. Gade, Christiansia, Norway.
J. H. de Bussy, Amsterdam, Holland, and the Dutch East Indies.
John Hogan, Melbourne and Sydney, Australia.
Freeman & Bro., Adelaide, South Australia.
Upton & Co., Auckland, New Zealand.
R. T. Wheeler, Dunedin, New Zealand.
W. Snelling, Brisbane, Queensland.
A. G. Webster, Hobart Town, Tasmania.
Knight & Co., Newchwang, China.
Kelly & Walsh, Shanghai, China.
Kelly & Co., Yokohama, Japan.
A. Illustracao Brasileira, Rio de Janeiro, Brazil.
Camilo Garcia, Puntarenas, Costa Rica.
Federico Caine, Havana, Cuba.
Seymour Keeler, Valdivia, Chili.
E. P. Pellet, Barranquilla, Colombia.
Pedro Obregon, La Guaira, Venezuela.
Ing. de El Ferrocarril, Montevideo, Uruguay.
Bethencourt e hijos, Curacao, W. I.
Da Costa & Co., Barbadoes, W. I.
Chas. Bartlett, Jr. & Co., St. Pierre, Martinique, W. I.
J. O. Eyder, Tananarive, Madagascar.
I. J. Cohen de Lissa, Port Louis, Mauritius.
Joaquin G. Castilla, Tampico, Mexico.
G. C. Cato, Durban, Natal.
Thomas G. Thurum, Honolulu, Sandwich Islands.
John G. Clark, Kingston, Canada.
C. Haight, Toronto, Canada.

TO CORRESPONDENTS.

As THE PAPER TRADE JOURNAL is the recognized vehicle of communication in matters of trade interest, we will be glad to receive correspondence from all parts of the country. Information and suggestion upon paper-making topics are especially valuable, and manufacturing news and personal items are equally acceptable.

Subscribers to THE JOURNAL can be supplied with the best cloth binder in the market. Deliverable at the publication office. Price, \$1.25.

Readers of this paper who avail themselves of the information obtained from its columns, by advertisement or otherwise, are requested to notify their correspondents of the source of their information.

WHAT with past rains and storms now upon us the fear of too little water during the winter is likely to be dispelled. Reports from Holyoke indicate a full supply in the Connecticut, which has been replenished quite liberally during the past fortnight.

AND now the mills are all hard at work running off paper. Orders have to be filled, and from all that we can learn there is a lively prospect ahead, for the winter at least. There may be reason, therefore, to expect a little more activity in the paper stock market, which has acquired a somewhat more cheerful tone this week. With the rain the stock dealers' hopes rise, but with a drought their tears fall. So, whatever the condition of the weather, we are sure to have water from one source or another.

"COUNTERVAILING duties" is the euphuistic term given in England to protective duties, now that the disciples of free trade are looking about for means to oppose for-

eign competition in their own markets. Truth is, our cousins are dreadfully afraid that they shall be thought inconsistent in terms, if not in action, by declaring for protection out and out. It is not less plain, however, that there is a larger and growing opinion in Great Britain favorable to the renunciation of free trade ideas. English manufacturers might just as well stop paying their subscriptions for the publication of pamphlets and free trade arguments to be circulated in this country. They have given the greatest help to free trade apostles in this country, but, in the light of very recent events, they ought to realize that we will have none of it.

PROFESSOR EXNER, commenting in the Wochenblatt on the paper exhibit at the Austrian Exposition of 1880, attributes the success of Austrian paper makers in competing with the English, Dutch, and with the Germans despite the duty in Germany, chiefly to the abundant water power in Austria and the purity of the water in many localities. Besides he points to the abundance of rags, especially linen in the eastern provinces, which helps to cheapen the production. To this we might add, the low wages which are paid to the help, although we do not think that in this particular Austria has any advantage over Germany. The Austrian paper trade seems to be extending its markets and pushing its competition much to the discomfort of European rivals, and we really think that there must be some further explanation for this success than the abundance of water power and rags.

THE paper trade are to be congratulated upon some of the successes of the late elections. We say this without political thought or bias, but with reference only to the representative character and high standing of the gentlemen who have been chosen from the ranks of the paper manufacturers as members of Congress. Four representatives of the trade will take their seats in the next national legislature. Two of these, William A. Russell, of Massachusetts, and Warner Miller, of New York, have worthily filled the station in the past, and the former has been returned by a majority twice as great as that which he received at his previous election. The other two, George West, of New York, and Emanuel Shultz, of Ohio, will take their seats for the first time, but with no less distinction as paper makers prominently identified with trade interests. Thus we see that, both in the consumption of paper and in their choice of representatives, the people display that measure of culture and intelligence which has brought the American paper manufacture to the front of the paper-making industry of the world. We congratulate our Congressmen elect and their constituencies, special and general, upon their election.

CLASS in paper making, stand up! The trade would be surprised—perhaps amused—if they heard such a command as that which prefaces these remarks, but it is now quite in the way of being the correct thing. Technological classes have been started in England, and among them is one for instruction in paper manufacture. We are told that the course of instruction will not only embody a thorough explanation of the subject, but will be helped by experimental illustration, and that applied chemistry will be taught so far as it affects the various chemical processes in the manufacture of paper. This is a very good feature; but, aside from the instructors' outline of work, we think that it would be very desirable for the scholars who may be practical paper makers to be given the opportunity for discussing the manufacture of paper and for instituting a mutual investigation of personal experiences, ideas and principles gained from daily intercourse with paper making processes. Holyoke is a good place to start such a class in, and we think that the paper makers there ought to form a class or club and learn and impart all that can be had or that they know about paper, from the first introduction of stock into the mill until it goes out of the door to be shipped to its market. Our columns show how much might be brought

out by an interchange of knowledge and a discussion of paper making topics. Correspondents carry this idea into effect, although to a very limited extent; and the points and inquiries suggested and made through THE JOURNAL show how useful technological classes can be made.

PAPER STOCK IMPORTS.

The total imports of rags and paper stocks at the port of New York during the month ended October 31, as reported, were 16,555 bales, an increase over the corresponding month of last year of 2,835 bales, and an increase compared with October, 1878, of 5,743 bales. There was a decrease from last year in rags of 5,078 bales. Manilla stocks show a decrease of 2,633 bales, and old papers an increase of 10,546 bales. The total figures in each class of stock during the month of October for the years 1880, 1879 and 1878, are as follows:

Table with 3 columns: Year (1880, 1879, 1878) and rows for Rags, Old papers, Manilla stocks, and Totals.

The arrivals from the different ports were as follows: London, 28 bales rags, 5,682 bales old papers; Liverpool, 175 bales rags, 1,809 bales old papers; Hull, 513 bales old papers; Bremen, 34 bales old papers; Antwerp, 828 bales old papers; Glasgow, 1,473 bales old papers; Hamburg, 722 bales old papers; Leghorn, 485 bales old papers; Nassau, 15 bales old papers; Cardiff, 66 bales old papers; Copenhagen, 408 bales old papers; Newcastle, 673 bales old papers; Rotterdam, 149 bales rags, 162 bales old papers; Calcutta, 1,516 bales rags, 200 bales old papers; Naples, 1 bale old papers; Alexandria, 981 bales old papers; Amsterdam, 281 bales old papers; Bermuda, 41 bales old papers; Bristol, 63 bales old papers, and Dundee, 251 bales old papers.

Communications.

[Communications are solicited from everyone who has anything of value or interest to impart. Items of news, trade gossip, and personal information will be gladly received. Correspondents are requested to write only on one side of the paper. No responsibility for the opinions of correspondents attaches to this paper. Communications must be sent to reach this office by Wednesday night or Thursday morning, of each week, to insure insertion.]

Again the Engine Roll.

As every one appears to have a different idea about raising and lowering the engine roll and as every one seems to be in the belief that his plan is best, I will now, Mr. Editor, with your permission, give my view of the matter. My idea would be to have a shaft of the same length or perhaps a little longer than the shaft of the engine roll, and on the shaft to have two cams or eccentrics, one placed under each of the engine roll bearings, and on the extreme end of the shaft to have a stout pinion, say 30 inches in diameter, where a small wheel or screw could operate. This plan would be simple and efficient. It would not interfere in any way with stone abutments further than drilling a hole for the shaft to go through, and in my opinion would cost less money than any other plan heretofore suggested. I will, however, in the meantime, leave the merits and demerits of it with your readers to decide. GARTSHERRIE.

A Question of Origin.

LEWISVILLE, Chester County, Pa., October 30, 1880. To the Editor of The Journal: I see that the question of raising both ends of the engine roll is creating considerable discussion in your valuable paper; and it is strange that there should be so little known about the devices for raising the roll when they are in use in over half a dozen of the different States. Cannot the Messrs. Crane, Hulbert, Sheffield, and others, who are using them, give the many readers of your paper the facts as to the working value of them? Where the idea was taken from amounts to but little if it can be brought into practical use. Some one claims that it was taken from a mill near Castleton, N. Y., where engines, gotten up on similar principles, have worked for several years. The patentee, certainly, did not get the idea from Edinburgh, Scotland, as your correspondent "A. L." intimates. BERKSHIRE.

Keeping the Weight Uniform.

To the Editor of The Journal: Reading in THE JOURNAL about stuff pumps, reminds me of asking a question which I think some of your correspondents can answer. Has any one thought of, or tried, a fan pump for raising the pulp from the chest to the machine? If so, would he be kind enough to give his experience? It seems to me it would be much the best way; and, as the pump would require to be very small, it would not take a great deal of power to drive it. This idea is intended only for fine mills, as the writer is aware that it would

not suit in mills where a bushel or two of old iron is emptied down with every engine. The best plan I have yet seen for running paper near the weight is, to have two chests, both connected at the bottom, one to be used for emptying into and the other for supplying the machine. The supply chest, sitting a little lower than the one in which the pulp is emptied, gives an opportunity when changing stock or color, to work the stuff out clean before washing up. Paper made from chests placed as above stated, varies little in weight, and this item alone will in a short time pay for the extra chest and a fraction over. SUCTION BOX

A Point in American Invention.

Troy, N. Y., November 3, 1880. To the Editor of The Journal: We notice that it is stated in an article in your JOURNAL of October 30, on the manufacture of paper hangings, that in 1834 a man by the name of Zuber exhibited in Paris a machine for printing the patterns on paper hangings. This work had previously been done solely by hand work, and that the Frenchman's ingenuity revolutionized this industry. This may have been the case in France. But, for the information of the paper trade, we wish to state that the first machine for grounding, polishing and printing paper hangings by revolving brushes, cylinders and use of roll paper, were made at Troy, N. Y., in the year 1839, by William Orr, the senior member of the present firm of Orrs & Co., which now manufactures print and hanging paper extensively at its Troy paper mill. William Orr was formerly engaged largely in the manufacture of paper hangings, and the printing machines were used in the manufactory of A. & W. Orr, at Troy, exclusively for a number of years, and afterwards were used by other manufacturers of paper hangings in an altered and improved form.

William Orr is now one of the oldest paper manufacturers in the United States, having been engaged in the trade more than fifty years. The first hanging paper made in rolls we think was made at Bennington, Vt., in A. & W. Orr's paper mill, about the year 1834. Before this time hanging paper was made in sheets and sized in a tub, and afterwards pasted together and printed by hand with blocks, on which the patterns were cut. Thus it will be seen that this valuable printing machine, now so extensively employed, has been altered and improved, and as now used in various forms, not only for printing paper hangings, but also for newspapers and books, is, in fact, an American invention, made and adopted first at Troy, N. Y.

Yours truly, ORRS & CO.

Changes, Removals and New Firms.

Emma Dickey, stationer, Kittanning, Pa., has sold out. F. K. Merritt, publisher of the Reveille, Newark, Cal., has sold out. Lavat & Murrin, printers, St. Louis, Mo., have dissolved partnership. Thomas L. Thompson, publisher of the Democrat, Santa Rosa, Cal., has sold out. L. Hirsch & Co., publisher of the Sonntagapost, Columbus, Ohio, have dissolved partnership. Taylor & Co., publishers of the Alleghanian, Cumberland, Md., have dissolved partnership. The style of Leadley & Howard, publishers, West Point, Iowa, has been changed to Weber & Howard.

M. A. O'Keefe has purchased the interest heretofore held by John D. O'Keefe, in the estate of E. O'Keefe, printer, of this city, and will continue the business under the style of E. O'Keefe.

John H. Hall will retire from the firm of Campbell, Hall & Co., paper manufacturers and dealers, this city, on January 1 next. He has disposed of all his large interest in the several paper mills owned and operated by the firm, and a change will also be made in the firm name at that time.

The partnership between Wm. W. Candee and George P. Wells, paper manufacturers, at Manlius, N. Y., under the style of Candee & Wells, has been dissolved, Mr. Candee retiring. George P. Wells will continue the business, assuming the liabilities of the late firm and collecting its accounts.

Failures.

Z. A. Hubley, of the firm of Hubley Brothers, rag dealers, Utica, N. Y., has made an assignment. The establishment of Brown & Foster, booksellers and stationers, St. Paul, Minn., has been closed by the sheriff.

Z. A. Hubley & Co., dealers in rags, Worcester, Mass., are reported failed. The cause of their failure is assigned to the fact that they were creditors of L. A. Murdock, to the amount of some \$9,000.

L. A. Murdock, shoddy, Worcester, Mass., is reported failed and offering his creditors 25 cents on the dollar. His liabilities are placed at about \$40,000.

In Town.

T. C. Bradbury, Mill River, Mass.; L. C. Woodruff, Buffalo, N. Y.; Geo. W. Russell, Lawrence, Mass.; Geo. W. Wheelwright, Boston, Mass.; T. A. Mole, South Adams, Mass.; T. O. Hurlbut, South Lee, Mass.; S. A. Parks, Glens Falls, N. Y.; Russell Jarvis, Claremont, N. H.; Rodney Wallace, Fitchburg, Mass.

New Patents.

REBIBUES. No. 9,488. Paper-Bag Machine.—Almon B. Glover, Birmingham, Conn., assignor, by mesne assignments, to the Eastern Paper Bag Company. Original No., 200,654, dated February 28, 1878. No. 9,489. Paper Perforating Machine.—Roswell T. Smith, Nashua, N. H. Original No., 199,144, dated April 3, 1877.

Chattel Mortgages.

[In the appended list R signifies a renewal of a pre-existing mortgage; b. s., bill of sale; and real, a mortgage on real estate.]

Table with columns: Mortgagor, Amount, and location (Eastern States, Western States, Southern States).

Fires.

A fire at the paper box factory of Allen & Boyden, Lynn, Mass., on October 28, caused a loss of about \$23,000; insurance, \$11,000.

A fire broke out on Thursday afternoon on the third floor of Molleson Brothers' paper ware house, at 18 Beekman street, this city, and before it was extinguished the stock on the floor below was damaged by water to the extent of about \$250, which is covered by insurance. Gas-fitters were at work at the time, and the fire is supposed to have originated through their carelessness.

BURNING OF THE THREE RIVERS PULP MILL.

About 3:30 A. M., on Tuesday morning, October 26, the mill of the Three Rivers Straw Pulp Company, at Three Rivers, Mich., caught fire and burned to the ground. The local paper gives the following account of the conflagration: The fire commenced in the straw room in the west end of the mills, and is supposed to have been caused by a spark from the big chimney, or by a spark carried from the straw cutter in the store room, and thrown into the straw room through the straw spout, and thus igniting the dry straw in the main building. The fire was discovered almost immediately by the men working in the same room, who got a stream of water playing upon the blaze from a Holly pump that was in the building within a very few minutes after the fire was discovered. The alarm spread to the Roset paper mills adjoining on the east, and the engineer blew the whistle for the fire alarm. The Holly works did most efficient service in keeping the fire from spreading fast, and after the place inside got so hot and smoky as to prevent anybody staying in there any longer, the men brought out the hose and threw water through the windows into the inside, until the hose burned off. The fire burned very slow, owing to the floor being wet and there being so much wet pulp and other materials in the building; but when the fire got to the middle of the main building it burned intensely, and the wind, commencing to blow stronger, and being of a westerly course, drove it right through the whole length of the building. About this time the pulp boilers commenced to blow off steam and made a terrific noise. The Lockport flouring mills, just west of the main building, would have been in great danger, and only the direction of the wind saved that from destruction. The straw barn north of the pulp mills caught fire a number of times, but was put out by a Babcock extinguisher and small hand force pumps and wet blankets. The greatest danger to any of the immediate property was to the Roset paper mills building, which joined the pulp mill, and was only separated from it by a hollow fire wall, eighteen inches thick, that extended out in front and rear of the pulp mill, six feet each way, and was six feet higher than the peak of the mill roof. To this wall the Roset paper mill owes the salvation of its numerous buildings and property, worth about \$50,000.

About a car load of pulp was saved and a very small amount of the stock of chemicals. The mill was equipped with three engines—one of 1,000 pounds capacity and two of 300 pounds capacity each, one 50-horse power engine, two wet machines, three straw digsters, three ash mixers, one bleach mixer, and two steam boilers.

The brick walls of the engine-room and the big chimney are still standing, and the wall is probably good enough to build upon, and no doubt the chimney is all right. The pulp company is an incorporated stock company, and its officers are as follows: J. W. French, president; C. W. Millard, secretary; N. H. Brokaw, superintendent. The following is a list of the directors and the stock they own:

Table with columns: Name and Amount.

The buildings were built and rebuilt in 1875, and were of the following sizes: 30x90, 2 stories high; 30x40, 2 1/2 stories high; 34x40, 2 stories high; brick engine and boiler house, 20x28, 1 story high. The loss is estimated as follows: buildings, \$14,000; machinery, \$30,000; stock, \$2,000, and was insured for \$12,500 in the following named companies:

Table with columns: Company Name and Amount.

More insurance had been promised the firm, but it is not known exactly whether it was placed or not. The mill employed generally between twenty and twenty-five hands, ran night and day, and turned out about \$85,000 worth of pulp per year. The company has not yet decided whether it will rebuild or not.

Explosions.

George Robertson & Son's large paper mill, Hinsdale, N. H., was blown up on October 29, killing E. J. Blackmer and seriously injuring four other operatives.

Manufacturing News.

EASTERN STATES.

The Russell Paper Company, Lawrence, Mass., will put in a large Lawrence engine, manufactured by Armington & Sons.

The Monadnock Paper Company, Bennington, N. H., has reset two boilers with the Jarvis furnace to burn wood.

The West Claremont Paper Company, West Claremont, N. H., has set a new steel boiler with the Jarvis furnace to burn wood.

Gas was last week introduced into the Housatonic and Eagle mills, Lee, Mass.

The excavation for the wheel-pit and raceway of the Dudley & Syms Paper Company has been completed several weeks in advance of the specified time.

The Bridge Mill Paper Company, Pawtucket, R. I., is building an addition to its mill, extending the same over the waters of the Blackstone River.

The Glazed Paper Company, Holyoke, is having a small tower run up from the corner of its new building.

The Winona paper mill, Holyoke, turned off its first roll of paper on Saturday of last week.

MIDDLE STATES.

Frank S. Peters' pulp mill at Cohoes, N. Y., was to have started up Monday of last week.

At Frank Gilbert's paper mill, Waterford, N. Y., extensive improvements are progressing. It is understood that a 100 horse-power engine will be placed in the new part, capable of driving the works when there may be a scarcity of water.

P. H. Gladfelter, Spring Forge, Pa., is applying the Jarvis furnace to six boilers and four soda ash reclaimers.

WESTERN STATES.

The rag engines at Louis Snider's Sons' new paper mill, Hamilton, Ohio, have started.

It is said that a Santa Clara Company is about to build a paper mill at Watsonville, Cal.

SOUTHERN STATES.

It is said that a mill for the manufacture of printing paper from the sugar cane will soon be in operation at New Orleans.

John A. Dushane & Co., Baltimore, Md., have set boilers in two of their mills, the "Ivy" and "Woodbine," with the Jarvis furnace, and are using cheap fuels with them.

SPECIAL NOTICES.

[Insertions under this heading will be charged 50 cents a line. Payment invariably in advance.]

SIXTH EDITION NOW READY.

Lockwood's Directory of the Paper Trade.

LOCKWOOD'S DIRECTORY is the only STANDARD authority of the kind, and is constantly consulted by the Trade in all parts of the country. Price, \$2.00.

Address HOWARD LOCKWOOD, Publisher, No. 74 Duane Street, New York.

ATTERBURY BROS., Packers of Rags and Paper Stock, 253 & 255 Front St., New York City.

THOS. SMITH, Wholesale Dealer in Cotton and Woolen Rags. Office, 80 Hester st., and Warehouse, 75 Pike st., N. Y.

JOHN L. TAYLOR, Importer of Rags, Waste Papers and Jute Stocks. All grades on hand and to arrive at lowest prices. No. 60 DUANE ST., NEW YORK

Market Review.

OFFICE OF THE PAPER TRADE JOURNAL, FRIDAY, NOVEMBER 5, 1880.

THE MONEY MARKET.—The monetary situation was characterized by ease throughout almost the entire week, the rates for call loans, on pledge of stock collateral, ranging between 2 and 4 per cent.

The government bond market was somewhat

irregular. A fairly active inquiry prevailed throughout most of the week, and prices were generally strong; the closing quotations, however, showed a general decline, ranging from 1/4 to 3/8 per cent.

The Stock market was characterized by strength and activity early in the week, but towards the close, efforts were made to depress the market, by the circulation of rumors calculated to create a feeling of uneasiness, under which influence prices fell off 1/4 to 3/8 per cent.

Railroad mortgages were in heavy demand, the dealings being well distributed throughout the list, and prices showed a material improvement. At the close the demand continued fair, but the market was irregular.

The Sterling Exchange market was weak, and although no change was made in the nominal asking quotations, business was done at concessions ranging from 1/4 to 1 1/2 c. from the posted figures.

The posted rates at the close were: Sterling, 60 days, actual, \$4.81 1/2 @ 4.81 1/2; sterling, sight, actual, \$4.83 1/2 @ 4.84; cable transfers, nominal, \$4.84 1/2 @ 4.85; commercial sterling, prime, long, \$4.80 1/2 @ 4.80 1/2; documentary sterling, 60 days, \$4.79 1/2 @ 4.80; Paris, bankers', 60 days, \$5.25 @ 5.25 1/2; do., sight, \$5.23 1/2 @ 5.23 1/2; Antwerp, bankers', 60 days, \$5.25 @ 5.25 1/2; do., sight, \$5.23 1/2 @ 5.23 1/2; Swiss, bankers', 60 days, \$5.25 @ 5.25 1/2; do., sight, \$5.23 1/2 @ 5.23 1/2; reichsmarks (4), bankers', 60 days, \$4.94 1/2 @ 4.94 1/2; do., sight, \$4.95 1/2 @ 4.95 1/2; guilders, bankers', 60 days, \$4.0 @ 4.0 1/2; do., sight, \$4.0 1/2 @ 4.0 1/2; and Paris dispatches quote exchange on London at 25f. 28 1/2 c.

THE PAPER TRADE.—Business has been somewhat broken into this week, Tuesday being a legal holiday on which wholesale trade was suspended. The election now being happily over, there is a restoration of confidence among the trade, and a feeling of certainty that business may be expected to go on much the same as before, only with a new impulse.

The drought having been broken to some extent, it will enable mills that have had an accumulation of orders to fill them now more expeditiously. Notwithstanding there is an increase of water power, there are many manufacturers on the smaller streams who have been benefited very little, and who are apprehensive that winter may set in and leave them entirely helpless, so far as water power is concerned.

As a general thing, manufacturers are fairly engaged on orders, and we hear little or no complaint of a lack of employment. In regard to prices, there are no signs of any early giving way, if we except an easier tendency in straw boards and straw wrappings, as previously mentioned, the prices of both of these grades being quite nominal. While there is a steady tone to the market generally, large buyers are not disposed to anticipate their wants for any considerable length of time ahead, preferring to buy with the market, an evidence that the market is not controlled at present in the slightest degree by any speculative feeling.

The movement at the hands of dealers, though by no means active, is steady and fairly satisfactory, all things considered. Stocks of goods have continued to decrease up to the present, and the supply is unusually light for this time of the year.

JUTE BUTTS.—This has been a very quiet week for Jute Butts, the sales being confined to trifling jobbing parcels. Holders will now take 2 1/2 c. cash, for round lots paper quality, or 3 1/2 c. time, for small parcels of 500 bales or less. Bagging Butts are quoted within the range of 2 1/2 @ 3 c., according to quality. No arrivals have been reported during the week. Total stock in first hands in New York and Boston November 1 about 55,500 bales; same time last year, 23,000 bales.

WOOD PULP.—The demand is still very fair, with a small increased supply owing to the recent rains. It is said that, with the early completion of a number of new mills, the sharp competition will result in prices being lowered. We continue to quote 3 @ 3 1/2 c. as the range of price for inferior to best qualities of Ground Wood Pulp, and 5 1/2 c. for Chemical Fibre.

FOREIGN RAGS AND PAPER STOCK.—The market is still very quiet, no transactions of note having occurred since our last, and, as a general thing, both buyers and sellers continue to hold off. Importers and dealers look forward to an increased movement in the course of the next fortnight, now that most of the mills are enabled to run on full time again.

DOMESTIC RAGS.—These continue to rule very dull, and, as apt to be the case on a dull market, prices, as a general thing, favor buyers. There is some little inquiry for No. 2 City Whites, but No. 1 and Seconds attract very little attention. Seconds, particularly, are in full supply, and a very fair quality can be secured now at 2 1/2 c. No. 1 Whites are still held at 4 1/2 c. for prime, and No. 2 do. at 3 1/2 c., while ordinary to inferior are offered at 3 c. Included in the sales were 50 bales No. 2 City Whites at 3 1/2 c., and 100 bales City Seconds at 2 c.

3 1/2 c. Jute Rope is still nominally quoted at 2 1/2 c. Among the sales reported were 35 tons No. 1 Gunny Bagging at 2 1/2 @ 2 9/16 c., and 20 tons Domestic Manila Rope at 3 1/2 c.

OLD PAPERS.—Prices remain steady, but the market is inactive, yet holders do not show much disposition to urge supplies. We continue quotations as follows: Solid Book Stock, 3 1/2 @ 3 3/4 c.; Light do., 1 1/2 @ 1 1/4 c. Hard White Shavings quoted at 4 1/2 @ 4 3/4 c.; Soft do., 4 1/2 c.; Pure Manilla, 2 1/2 @ 2 3/4 c.; Binders' Chips, 1 1/2 c.; Straw do., 1 1/2 @ 1 1/4 c.; Commons, 80 @ 85 c.; Colored Shavings, 3 1/2 @ 3 3/4 c., and Folded News, 2 1/2 @ 2 3/4 c. We note a sale of 40 tons Folded News at 2 1/2 c.

STRAW.—Continues to move fairly, with prices firm and unchanged. New York city prices are: Long Rye, \$1 @ 1.05; Short do., 80 @ 85 c., and Out at 70 c.

ROSINS.—Have ruled very dull, with prices nominally as before. We continue to quote job lots from yard, viz.: C Strained, \$3; D Good Strained at \$2.30; E at \$2.35; F Good No. 2 at \$2.50; G Low No. 1 at \$2.75; H No. 1 at \$2.83 1/2; I Good No. 1 at \$3.30; K Low Pale at \$3.30; M Pale at \$3.50; N Extra Pale at \$4, and W at \$4.25.

CHEMICALS.—There has not been very much inquiry since our last, and the market is dull. Prices are rather easy, and it would be difficult to place a large quantity, except at a low figure. Stocks of nearly all descriptions are large and are beginning to accumulate. Bleach has been in fair request, but there is an easier feeling. Caustic Soda has been in light demand and the price is steady. Caustic Ash is easier. High test is in jobbing request, but no large parcels are moving. Sal Soda has not sold very freely to arrive, and the demand for spot is also light. Alum is very firm. The demand continues quite active, and only little is obtainable for prompt delivery, manufacturers being well sold up. Aluminum Cake is dull, but prices remain steady. Sales are said to have been as follows: 200 cks. Bleaching Powders at 1.15 @ 1.20 c.; 200 tons Soda Ash at 1.60 @ 1.65 c.; 100 drums Caustic Soda, 60 per cent., at 3.75 c.; 50 tons Sal Soda at 1.25 c.; 300 barrels Lump Alum (Ammonia) at 2 c.; 150 barrels Ground Alum (Ammonia), at 2 1/2 c.; 100 barrels Ground Potash Alum at 2 1/2 c.; 400 barrels Lump Potash Alum at 2 c.; 300 barrels Pearl do. at 2 1/2 c.; 500 barrels Natrona Porous Alum at 2 1/2 c.; 50 tons Aluminum Cake at 1 1/2 c.; 20 cases Ultramarine at 20 @ 30 c.; 20 cks. yellow Prussiate Potash at 20 @ 30 c.; 25 cks. Bichromate do. at 12 c.; 30 cks. Antichlorine, at 3 c.; 10 cks. Orange Mineral at 9 c.; 200 barrels Venetian Red at 1 1/2 c.; 10 cks. White Sugar of Lead at 15 1/2 c.; 20 cks. Brown do. at 10 c.; 300 barrels Corn Starch at 3 1/2 c.; 100 bbls. Potato do. at 4 1/2 c.; and 2,000 bxs. Extract Logwood at 9 c.

CHINA CLAY, &c.—In English Clay there has been only a light jobbing trade in progress during the past week. Stocks at present are said to be light, but buyers for the most part have been pretty well supplied by free purchases of lots to arrive. Southern has a fair demand and is quoted at \$11 @ 12, according to quality. We note sales of 25 tons English Clay at \$16, and 30 tons Southern do. at \$12.

COAL.—The business in Anthracite Coal continues in a very healthy condition, the lateness of the season and the harmony that exists among producers tending to support present values. Seward's Coal Trade Journal says: "Prices are, if anything, tending toward firmer connection with the printed lists. As at present understood, the operators are going to take care of the trade and not allow it to fall into the ruinous condition that prevailed in the last three winter seasons. The demand for coal to go to the Western market keeps up, and from all reports there must be a good tonnage in this direction all winter. The population and manufactures increase in such a ratio, at the West that fuel of all varieties will be in demand at fair prices. Manufacturers have gone to using soft coal in many places because they cannot secure supplies of Anthracite from one cause or another. We are still in doubt as to any programme for the winter season, but have the assurance of many parties that the trade will be kept in a good healthy condition; the managers must not forget that the facilities for increasing the output are largely ahead of what they were a year or so ago, and unless the demand keeps up or runs ahead of what it now is, half-time may give us too much coal to dispose of. There is no change in the prices of coal for the line trade for delivery during the month of November. The miners and shippers of Anthracite coal for the Western market have taken no action on prices for November, but will meet at Chicago on Wednesday next to adjust rates." Quotations of Lehigh Coal at New York shipping points are: Lump, \$5.25; Egg, \$4.40; Stove, \$4.45, and Chestnut, \$4. Lackawanna is \$4 for Lump, \$4.30 for Egg, \$4.45 for Stove, and \$4.10 for Chestnut. Bituminous coal ranges from \$3.75 to \$5, as to quality and place of delivery.

SHAVINGS AND OLD PAPER.—White Collar Cuttings, muslin lined. 5 1/2 @ 5 1/2 c. Hard White Shavings, No. 1. 4 1/2 @ 4 1/2 c. Soft White Shavings, No. 1. 4 1/2 @ 4 1/2 c. White Shavings, No. 2, soft. 4 1/2 @ 4 1/2 c. Mixed Shavings, part white. 3 1/2 @ 3 1/2 c. Ledger and Writing. 3 1/2 @ 3 1/2 c. Solid Stock. 2 @ 2 c. Book Stock, No. 1, light. 2 @ 2 c. Old Newspapers. 2 @ 2 c. Pure Manilla. 1 1/2 @ 1 1/2 c. Bogus Manilla and Hardwares. 1 1/2 @ 1 1/2 c. Commons. 80 @ 80 c. Binder's Board Cuttings. 1 1/2 @ 1 1/2 c. Straw Board Cuttings. 1 1/2 @ 1 1/2 c. English Rags, &c. Essex Fines. 5 1/2 @ 5 1/2 c. London Fines, cotton. 4 1/2 @ 4 1/2 c. Louisiana, cotton. 4 1/2 @ 4 1/2 c. Seconds, extra. 3 1/2 @ 3 1/2 c. Thirds. 3 1/2 @ 3 1/2 c. New Print Tabs. 3 1/2 @ 3 1/2 c. Checks and Blues. 3 1/2 @ 3 1/2 c. Light Prints. 3 1/2 @ 3 1/2 c. Dark Fustians. 3 1/2 @ 3 1/2 c. Black Calicoes. 3 1/2 @ 3 1/2 c. First Canvas Linen. 3 1/2 @ 3 1/2 c. Second Canvas Linen. 3 1/2 @ 3 1/2 c. Black Bagging, No. 1. 3 1/2 @ 3 1/2 c. Gunny Bagging, No. 2. 3 1/2 @ 3 1/2 c. Mixed Bagging. 3 1/2 @ 3 1/2 c. Burlap Bagging, No. 1. 3 1/2 @ 3 1/2 c. Rope, Manila, tarred. 3 1/2 @ 3 1/2 c. Jute Ropes. 3 1/2 @ 3 1/2 c. Jute Waste. 1 1/2 @ 1 1/2 c. English Old Papers and Shavings. Hard Shavings, No. 1. 4 1/2 @ 4 1/2 c. Soft Shavings, No. 1. 4 1/2 @ 4 1/2 c. White and Colored Shavings, No. 2. 3 1/2 @ 3 1/2 c. Cream Shavings. 3 1/2 @ 3 1/2 c. Paper-collar Cuttings. 4 @ 4 c. Ledgers, Briefs and Letters. 3 1/2 @ 3 1/2 c. Newspapers and Pamphlets, extra. 3 1/2 @ 3 1/2 c. Old Newspapers. 3 1/2 @ 3 1/2 c. Broken News and Letters. 3 1/2 @ 3 1/2 c. New Books, Solid Folio. 4 @ 4 c. Old Blank Books. 3 1/2 @ 3 1/2 c. Old Printed Books. 3 1/2 @ 3 1/2 c. White and Buff Railway Sheets. 3 1/2 @ 3 1/2 c. Railway Tickets. 1 1/2 @ 1 1/2 c. Hamburg Rags, &c. LINENS. Linen Cuttings, No. 1. 5 1/2 @ 5 1/2 c. S P F. 4 1/2 @ 4 1/2 c. F F. 4 1/2 @ 4 1/2 c. L F X. 3 @ 3 c. Extra Fine Blue Linen, light color. 4 1/2 @ 4 1/2 c. L F B. 4 1/2 @ 4 1/2 c. Gunny Bagging, No. 1. 3 1/2 @ 3 1/2 c. Burlap Bagging, No. 1. 3 1/2 @ 3 1/2 c. COTTONS. Shirt Cuttings. 5 @ 5 c. S P F. 4 1/2 @ 4 1/2 c. S F F. 4 1/2 @ 4 1/2 c. F R. 3 1/2 @ 3 1/2 c. C F X. 3 1/2 @ 3 1/2 c. Extra Fine Blue Cotton. 3 1/2 @ 3 1/2 c. Cotton Canvas. 4 1/2 @ 4 1/2 c. ROPE. T R (tarred). 3 1/2 @ 3 1/2 c. M R (standing rigging). 3 1/2 @ 3 1/2 c. P T H (standing rigging). 3 1/2 @ 3 1/2 c. Old Book Paper. 3 1/2 @ 3 1/2 c. Old Printed Books. 3 1/2 @ 3 1/2 c. Imperfections. 3 1/2 @ 3 1/2 c. White Shavings. 3 1/2 @ 3 1/2 c. Colored Papers. 3 1/2 @ 3 1/2 c. Writing Papers. 4 @ 4 c. Leghorn and Genoa Rags. P P No. 1 White Linens. 5 1/2 @ 5 1/2 c. S S No. 2 White Linens. 4 1/2 @ 4 1/2 c. T T No. 3 White Linens. 4 1/2 @ 4 1/2 c. R R Linen Stripes. 4 1/2 @ 4 1/2 c. P C No. 1 White Cottons. 4 1/2 @ 4 1/2 c.

PRICES CURRENT.

NEW YORK MARKET.

Table with columns for Paper Market, Dealers' Selling Prices, and various types of paper and rags with their respective prices.

Table listing various types of paper and rags such as Hanging Buff, Hanging Brown, Colored Papers, etc., with prices.

Table listing various types of woolen rags and shavings, including Comforter Stock, White Woollens, Blue Grey Stockings, etc.

Table listing various types of rags, rope, and bagging, including White Shirt Cuttings, White Shirts, etc.

Table listing various types of shavings and old paper, including White Collar Cuttings, Hard White Shavings, etc.

Table listing various types of English old papers and shavings, including Hard Shavings, Soft Shavings, etc.

Table listing various types of Hamburg rags and linens, including Linen Cuttings, S P F, etc.

Table listing various types of Leghorn and Genoa rags, including P P No. 1 White Linens, S S No. 2 White Linens, etc.

Table listing various types of cottons, including S C No. 2 White Cottons, T C No. 3 White Cottons, etc.

Table listing various types of whites, blues, and colors, including Whites, Blues, Colors, etc.

Table listing various types of chemicals and coloring materials, including Alum, Alum ground, Alum pearl, etc.

BOSTON MARKET.

Paper.—Prices hold very firm, with continued scarcity in some grades.

Paper Stocks.—Demand in general rather quiet, but some dealers report making a number of large contracts, manufacturers evidently thinking that prices can go little, if any, lower, even under present conditions, and should rain come in any quantity values would increase without doubt.

Chemicals.—Ash, bleach and sal are about the same; demand is rather better. Alums remain same as to supply, with higher prices ruling. English clay is in better supply. A vessel has just arrived with a quantity, which is selling well, the price at which it is offered tempting consumers to buy freely. Prices of rosins are firm, with only little selling.

Paper Stock.

Table listing various types of paper stock, including Mill Assorted Whites, Cotton Canvas, etc.

Table listing various types of English rags and shavings, including Essex Fines, Louisiana, cotton, etc.

Table listing various types of English old papers and shavings, including Hand Shavings, Soft Shavings, etc.

Table listing various types of Leghorn rags, including P P No. 1 Linens, S S No. 2 Linens, etc.

Table with columns for 'Constantinople Rags', 'New Papers', and 'Chemicals'. Lists various paper types and their prices.

Table with columns for 'Rags and Paper Stock', 'Paper', and 'MILWAUKEE MARKET'. Lists various paper types and their prices.

FOR SALE—FOUR BRASS PRESS ROLLS, 84-inch face, 14-inch diameter; in perfect order. TWELVE DANDY ROLLS, 62-inch face, 5 wove and 7 laid.

THE WRITER IS MAKING, TURNING AND GRINDING all kinds of Rags; Making and Repairing Dandies and Cylinders. Paper Knives made and ground. Calenders on hand. Shafting, Gearing and Pulleys; Engines and Pumps; Hydraulic and Screw Presses; machines to test the strength of paper or other material; Power, Hand and Hydraulic Elevators or Hoists. We can furnish any parts for Gavit machines.

PAPER MILL FOR SALE. At West Dudley Depot, Mass. The machinery consists of one 64-inch Double Cylinder Machine, 5 Beating and Washing Engines, Bleachers, Boilers, and all the machinery necessary for making paper.

FOR SALE. A 62-inch Machine, all complete and in first-rate condition. Stuff Pump, none better. Screens, Vat nearly new. Making Cylinder. First and Second Presses. Four 36-inch Driers. Four Calenders. Six Revolving and Eight Upright Reelers. Cutter, Sitters and Winders, all complete. Good Driving Gearing, all iron frames. One Rotary Bleacher, 8x17, in good shape. One Press Cutter, 40-inch Knife. One 30-inch Engine, with Cylinder Washer. This machinery we are desirous of selling and will sell at a bargain.

SPLENDID CLAY DEPOSIT, Guaranteed by the most experienced operator in Pennsylvania. A considerable part of the money to work already engaged. This is the same quality and near the "Star Clay," but only 100 yards from a railroad station. A rare opportunity. Send for specimens and particulars to WM. CURTIS TAYLOR, Philadelphia, Pa.

FOR SALE. Stack New Chilled Calender Rolls, 80-inch face. Bottom Roll, 14 inches diameter. Top Roll 12 inches diameter, and seven intermediate 7 inch diameter, with Stands, Shaft, Pulleys, &c., complete.

FOR SALE. One 62-inch Cylinder Machine, containing five Copper Driers, 38-inch diameter; New Making Cylinder, 36-inch diameter; Vat and Pulp Dresser; one Stack of Calenders, and one Gavit Cone Cutter. Price \$15,000. Can be seen standing at Slackwater Paper Mills, Lancaster, Pa. Address JOHN A. SHOBER, Lancaster, Pa.

FOR SALE. THE EXETER PAPER MILL, located at Exeter, N. H., on the Boston and Maine Railroad. One 62-inch Double Cylinder Machine; one 30 horse-power Steam Engine; Tubular Boilers, Duster, Pumps.

FOR SALE. Three (3) 250-lb. Rag Engines, now running in Highland Paper Mills. Apply to JAMES A. TOWNSEND, Newburg, N. Y.

PAPER MILL FOR SALE. FIFTY miles from New York; Double Cylinder, 48-inch Machine, 6 Dryers, all accessories for making No. 2 manilla, news, or other papers; Mill built in 1874; cost over \$30,000; will be sold for \$10,000 cash, or a half-interest for \$6,000. Address E. W., care Paper Trade Journal.

SAVANNAH PAPER MILLS For Sale as a whole or part Interest, or for Lease. The above mill, situated in Savannah, Georgia, having just been thoroughly overhauled, and by the additions of new machinery it is now one of the most complete Manilla Mills in the country, now running full time. Capacity 5,000 pounds daily. This mill has the advantages of low freight rates by water, cheap fuel, and not affected by freezes or low water. Good local business and other encouragements. The present owner not being a practical paper maker wishes to sell the whole property or would prefer to sell a part interest to some practical party who will take charge and conduct the business. To the right party this is an opportunity seldom met with. Full information can be obtained by addressing SAMUEL P. HAMILTON, Proprietor, Savannah, Georgia.

GANDY'S PATENT AMERICAN COTTON MACHINE BELTING Manufactured by THE GANDY BELTING CO., Hollingsworth Street, Baltimore, Md.

ADVANTAGES.—Much cheaper and stronger than leather. Thoroughly waterproof, and not affected by temperature. Clings well to the pulleys. Runs true, and can be made any length without joints. Used in all the principal paper mills of Great Britain.

JOHN CROTTY, (Late of BARRETT & CROTTY,) Paper and Twine Warehouse 393 BROOME ST., NEW YORK. Samples of Wrapping Manilla and Rope Papers solicited from Manufacturers.

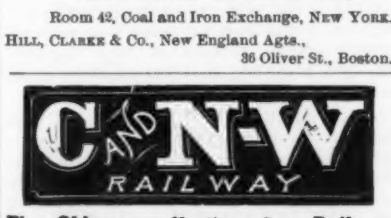
JOHN McLAUGHLIN, MACHINIST, And Manufacturer of Cylinder Machines, Calenders, Wood or Iron Rag Engines, Bed Plates, Roll Bars, Shafting and Gearing, Trimming Presses, Stamps, Extension Holders, Chilled Iron Rolls, &c. LEE, Mass.

ORDERS SOLICITED FOR Japanese Rags, Paper Stock and Tree Bark Fibres, In any Condition and in any Quantities. WM. H. DOYLE, Yokohama, Japan.

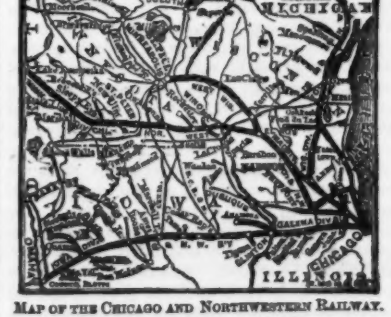
LEFFEL'S Improved Turbine Water Wheel. Send for new descriptive Wheel Book. Prices greatly reduced. JAS. LEFFEL & CO., Springfield, O., and 110 Liberty St., New York.

BUCKEYE ENGINE CO. In anticipation of the usual pressing fall demand, resulting from low water, we have nearly completed a LIMITED NUMBER OF BUCKEYE 40 to 100 HORSE POWER ENGINES, Or 80 to 200 Horse Power, in Pairs, WHICH WE CAN DELIVER ON SHORT NOTICE.

BUCKEYE ENGINE CO., Room 42, Coal and Iron Exchange, NEW YORK. HILL, CLARKE & Co., New England Agts., 35 Oliver St., Boston.

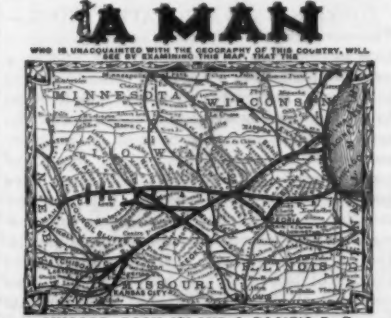


The Chicago & Northwestern Railway. It is the oldest, best constructed, best equipped, and hence the most reliable railway corporation of the West. It is to-day the Leading Railway of the West and Northwest. It embraces under one management 2,320 miles of road, and embraces the following Trunk Lines: "Chicago, Council Bluffs & California Line," "Chicago, Sioux City & Yankton Line," "Chicago, Clinton, Dubuque & La Crosse Line," "Chicago, Freeport & Dubuque Line," "Chicago, La Crosse, Winona & Minnesota Line," "Chicago, St. Paul & Minneapolis Line," "Chicago, Milwaukee & Lake Superior Line," "Chicago, Green Bay & Marquette Line."



MAP OF THE CHICAGO AND NORTHWESTERN RAILWAY. The popularity of these lines is steadily increasing, and passengers should consult their interests by purchasing tickets via this line. Tickets over this route are sold by all coupon ticket agents in the United States and Canada. For information, folders, maps, &c., not obtainable at Home Ticket Office, address any agent of the company or W. H. STENNETT, Gen'l Passenger Agent, Gen'l Manager, Chicago, Ill.

T. NEW'S PREPARED ROOFING For steep or flat roofs. Applied by ordinary workmen at one-third the cost of tin. Circulars and samples free. T. NEW, 25 John St., New York. BARRETT, ARNOLD & KIMBALL, Western Agents, Chicago, Ill.



CHICAGO, ROCK ISLAND & PACIFIC R. R. IN THE GREAT CONNECTION LINE BETWEEN THE EAST & THE WEST! The Chicago, Rock Island & Pacific R.R. is the most direct and reliable line between the East and the West. It is the only line that runs through the heart of the West, and it is the only line that has the advantage of low freight rates by water, cheap fuel, and not affected by freezes or low water. Good local business and other encouragements. The present owner not being a practical paper maker wishes to sell the whole property or would prefer to sell a part interest to some practical party who will take charge and conduct the business. To the right party this is an opportunity seldom met with. Full information can be obtained by addressing SAMUEL P. HAMILTON, Proprietor, Savannah, Georgia.

McGowan's Pumps. Steam Pumps, Pulp or Stuff Pumps, New Buckeye Pumps, Pumps for all Purposes. HYDRAULIC PRESSES, For Pressing Water from Straw Board. HYDRAULIC PRESSES for FINE PAPER. Send for Catalogue. THEO. J. MCGOWAN & BLISS, 141 & 143 West Second Street, CINCINNATI, OHIO.

J. Henry Blanchard, Chemical Broker, No. 36 BATTERY MARCH ST., BOSTON, MASS. Soda Ash, Bleaching Powders, Sal Soda, Hyposulphite of Soda, Caustic Soda, English Alum, English Clay, Rosin, &c.

"Excelsior" South Carolina Clay, Phenix Aluminous Cake, AND WOOD PULP SIXTEEN YEARS' Experience in the manufacture of Pumps for Paper Makers enables us to guarantee entire satisfaction in all cases. Our Latest Improved Pumps are perfectly adapted to the requirements of the Paper Manufacturer, and are not equaled by those of any other maker. We point with pride to the fact that there are more

HEALD & SISCO PUMPS in use in the Paper Mills in this country to-day than all other kinds combined. Perfect satisfaction in all cases, or Pumps returned at our expense. Send for Illustrated Pamphlet giving full description, prices, &c. Address HEALD, SISCO & CO., Baldwinsville, N. Y.

Keystone Felts L. K. HEATHCOTE & CO., Glen Rock, Pa. FOURDRINER and CYLINDER Wet and Press Felts and Jackets. All Sizes and Styles suitable for the making from the coarsest to the finest paper. All Felts Guaranteed to run well or they can be returned. For best results from fast running try our XX style Felt for Fourdrinier Machines, and style "C" for Cylinder Machine. Prices sent upon application.

JOHN C. SMITH, GENERAL MILL REPAIRER. Paper Mill Machinery a Specialty. REPAIRS ATTENDED TO BOTH NIGHT AND DAY. HOLYOKE, MASS. AGALMATOLITE. Superior to imported Talc for Paper-makers' and Paper-hanging manufacturers' use. SEND FOR PRICE LIST. R. DUNDAS CHATER, 187 Pearl St., New York.

Table with columns for 'Chemicals', 'Paper Market', and 'Paper Stock'. Lists various chemical and paper products and their prices.

Table with columns for 'Paper Market' and 'Paper Stock'. Lists various paper products and their prices.

Table with columns for 'Paper Stock' and 'Chemicals, Coloring Materials, &c.'. Lists various paper and chemical products and their prices.

Table with columns for 'Chemicals, Coloring Materials, &c.'. Lists various chemical and coloring products and their prices.

Table with columns for 'Chemicals, Coloring Materials, &c.'. Lists various chemical and coloring products and their prices.

Table with columns for 'Paper Market' and 'Paper Stock'. Lists various paper products and their prices.

Table with columns for 'Paper Market' and 'Paper Stock'. Lists various paper products and their prices.

MILWAUKEE MARKET.

Table with columns for 'Paper' and 'Rags and Paper Stock'. Lists various paper products and their prices.

Table with columns for 'Rags and Paper Stock'. Lists various paper products and their prices.

FOREIGN MARKETS.

London Market Report. LONDON, October 23, 1880. The position of our market remains unchanged, some large contracts at previous figures being again reported. RAGS.—The demand for strong middle-classed linens has slightly increased. Paper makers here are, however, unwilling to pay the prices asked, and business remains somewhat limited. Cottons remain pretty firm, and the smallest concessions on the part of buyers are invariably leading to business. GUNNY, ROPE, HEMP BAGGING, &c.—English mills are buying more freely, and exporters begin also to offer again for larger parcels. The old contracts are being now completed to a large extent. WASTE PAPERS.—Suitable parcels easily find buyers, while other qualities are somewhat neglected.

Advertisements.

CORLISS ENGINE BUILDERS, WITH WETHERILL'S IMPROVEMENTS. GUARANTEED THE BEST ENGINES. BOILER MAKERS, Rotary Boilers, Wood Digesters, WOOD CHIPPERS. ROBT. WETHERILL & CO., Chester, Pa.

WANTED—Situation as Machine Tender by a competent man of 10 years' experience, either Cylinder or Fourdrinier. Good references. Address, S. W., care of Paper Trade Journal.

WANTED—Two Second-hand Making Cylinders. Any width will answer. Address, P. BRENNAN, Address, P. O. Box 2,594, New York.

WANTED—For steady employment a first-class millwright who thoroughly understands paper mill work. Require satisfactory references as to ability, habits, &c. Married man about forty preferred. Address BATAVIA PAPER CO., Batavia, Ill.

WANTED—A stack of 5 44-inch Chilled Calender Rolls. A cutter for 44-inch Machine. Also Making Cylinder 48 inches long. Address MASSILON PAPER CO., Massillon Ohio.

WANTED—BY A GENTLEMAN WHO HAS had some experience in the paper trade, a position with a good house in the paper or paper stock business; is a good salesman, and has a good business training and experience; will accept a moderate compensation until ability is fully proven. Address WILLING, care of Paper Trade Journal.

FOR SALE—PAPER MACHINERY. Four Engine Roll Spindles, 9/4 feet by 6 inches, with stands and lighters complete. Cheap for cash. Address ADAMS & CO., Wagon Falls, Ohio.

FOR SALE—A JORDAN ENGINE, New, never been used. Reasons for selling, change of plans. Address F. H. BELL, Waterford, New York.

SPRINGFIELD CITY PAPER CO.,

JAS. P. FRANKLIN, Agent, Formerly of the Massachusetts Paper Company; ALFRED BIRNIE, Treas. E. C. LeBOURGEOIS, Sec'y.

Paper Warehouse and Finishing Room,

No. 257 MAIN STREET, SPRINGFIELD, MASS.

ENGINE-SIZED RULED AND FLAT A SPECIALTY.

A Full Line of Linens and Fines constantly in stock.

BYRON WESTON,

DALTON, MASS.

Has been awarded the GRAND PRIZE GOLD MEDAL, and recommended the Medal of Honor and Perfection at Paris, 1878, this being the Highest and Only Award given for

Linen Record Ledger Papers,

Which is our SPECIALTY.

This Paper has received the HIGHEST PREMIUM over all others wherever exhibited.

Send for Sample Sheet, Erase and Rewrite Four Times on same spot. Each sheet is Water-marked with name and date.

VERNON BROTHERS & CO.,

PAPER WAREHOUSE,

65 & 67 Duane St., New York,

Manufacturers of the following Brands of Writing: Alleghany, St. Lawrence, National, Bay View, Congress, Windsor, Neptune, Castle, Durand & Co., and Palisade Note, Letter, Foolscap, Legal and Bill Cap Papers.

Manufacturers of the Vernon Paper Company's Ledger Paper United States and Washington Flats, Superfine and Fine Flat of all sizes, White and Colored French Folios, Colored Flat Caps and Folios, Buff and Gold Envelope Papers, Engine Sized Flat Papers of first, second and third qualities, for Blank Book Manufacturers.

Manufacturers of Colored and White Tissue Papers and Tissue and Manilla Copying Papers.

Dealers in Rope and Jute Manillas of all sizes, Tissue Manillas, 16, 20 and 24 sheet count; Seidlitz Paper, Hardware, Machine and Super Calendered Book and News, Colored Poster, Glazed Cover; Diamond, all Rag, White and Colored Blotting—equal to any manufactured.

Importers and Agents for the sale of the English No. 682 White and Silver Ware Tissue.

Have now on hand a full line of the Celebrated Jessup & Laffin Woronoco Ledger Papers.

—RALPH MILLS—

—RALSTON MILLS—

A. G. ELLIOT,

Commission Paper Warehouse,

727 Chestnut St. and 726 Jayne St., Philadelphia, Pa.

Large stocks of RELIABLE GRADES of Paper, with ample facilities to execute orders. Quality and Weight guaranteed. RAGS, FELTINGS, CHEMICALS, ULTRAMARINE, &c., &c., &c.

STEAM BOILERS, Rotaries, Digesters, Tanks, Stacks,

And all kinds Plate Iron Work for Paper Makers.

TIPPETT & WOOD, - - - Phillipsburg, N. J.

THE NEW PULSOMETER

Is more Economical in Points of Original Cost, Expense for Repairs and Running Expenses, than any other Steam Pump in the World.

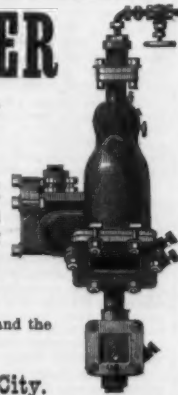
Simple and compact, with no machinery whatever to oil or get out of order, it stands at the head of all means of elevating water or other liquids by steam. It needs no skilled labor to look after it. Send for book giving full description, reduced prices, and many letters of commendation from leading manufacturers and others throughout the country who are using them.

PULSOMETER STEAM PUMP COMPANY,

Sole Owners of Hall's Patents in the U. S., 131,515 to 131,543, both inclusive, and the

NEW PULSOMETER.

P. O. Box No. 1593. Office, No. 83 John St., New York City.



EWARTS DETACHABLE CHAIN.



STEWART & CO.,
No. 125 North Third St.,
PHILADELPHIA.

Well adapted for various kinds of Paper Machinery.

THIS CHAIN IS MANUFACTURED OF MALLEABLE IRON AND THOROUGHLY TESTED.

Paper Making and Its Accessories.

BOOKS OF REFERENCE.

The following is a list of Books of Reference on subjects connected with Paper Making, Chemicals, Colors, Machinery, Hydraulics, &c.:

AUERBACH.—Anthracen: Its Constitution, Properties, Manufacture and Derivatives. 8vo.....	\$5 00
BAIRD.—Standard Wages Computing Tables. Folio.....	5 00
BENSON.—Principles of the Science of Color. 4to.....	7 50
BENSON.—Manual of the Science of Color. 12mo.....	1 25
BESANT.—A Treatise on Hydro-Mechanics. 8vo.....	5 25
BOX.—A Practical Treatise on Heat as applied to the Useful Arts. Illustrated by 14 plates. 12mo.....	5 00
BOX.—A Practical Treatise on Mill-Gearing. 12mo.....	3 00
BOX.—Practical Hydraulics. 12mo.....	2 50
BRESSE.—Hydraulic Motors. 8vo.....	2 50
BROWN.—Five Hundred and Seven Mechanical Movements. 12mo.....	1 00
BURNELL AND LAW.—Hydraulic Engineering. 12mo.....	1 25
CALVERT.—Dyeing and Calico Printing, including an Account of the Most Recent Improvements in the Manufacture and Use of Aniline Colors. With dyed Patterns. 8vo.....	8 00
CHEVREUL.—The Principles of Harmony and Contrast of Colors and their Application to the Arts. Illustrated with Colored Plates. 12mo.....	3 75
COOPER.—A Treatise on the Use of Belting for the Transmission of Power. 8vo.....	5 50
CORFIELD.—Water and Water Supply. 16mo.....	50
CRAIK.—The Practical American Millwright and Miller. 8vo.....	5 00
CROOKES.—Handbook of Dyeing and Calico Printing. With dyed Patterns. 8vo.....	21 00
CULLEN.—Practical Treatise on the Construction of Horizontal and Vertical Water Wheels. Quarto.....	5 00
DOWNING.—The Elements of Practical Hydraulics. 8vo.....	2 75
FAIRBAIRN.—The Principles of Mechanism and Machinery of Transmission. 12mo.....	2 50
FAIRBAIRN.—A Treatise on Mills and Mill work. 2 vols. 8vo.....	10 00
FANNING.—A Practical Treatise on Water Supply Engineering. 8vo.....	5 00
FRANCIS.—Lowell Hydraulic Experiments on Hydraulic Motors. Quarto.....	15 00
FRESENIUS.—Manual of Qualitative Chemical Analysis. 8vo.....	8 50
FRESENIUS.—System of Instruction in Quantitative Chemical Analysis.....	4 50
GLYNN.—A Treatise on the Power of Water. 12mo.....	1 00
HERRING.—Paper and Paper Making, Ancient and Modern. Plates. 8vo.....	3 75
HOFMANN.—A Practical Treatise on the Manufacture of Paper in all its Branches. Quarto.....	15 00
HUGHES.—American Miller and Millwright's Assistant. 12mo.....	1 50
JACKSON.—Hydraulic Manual. 8vo.....	14 00
JACOB.—The Designing and Construction of Storage Reservoirs. 16mo.....	50
JOHNSON.—The Practical Draughtsman's Book of Industrial Design and Machinist's and Engineer's Drawing Companion. With over 50 Steel Plates. 4to.....	10 00
KINGZETT.—The History, Products and Processes of the Alkali Trade, including the most recent improvements. 8vo.....	6 00
KIRKWOOD.—Report on the Filtration of River Waters, for the Supply of Cities, &c. quarto.....	15 00
KOOPS.—Historical Account of the Substances which have been used to describe Events and to Convey Ideas from the Earliest Date to the Invention of Paper. By Matthias Koops. Printed on Paper Manufactured solely from Straw. London, 1861.....	10 00
KUTTER.—The New Formula for Mean Velocity of Discharge of Rivers and Canals. 8vo.....	5 00
LEFFEL.—The Construction of Mill Dams. 8vo.....	2 50
MUNSELL.—A Chronology of Paper and Paper Making. 8vo.....	2 00
NEVILLE.—Hydraulic Tables, Co-efficients and Formulae for finding the Discharge of Water from Orifices, Notches, Weirs, Pipes and Rivers. 12mo.....	7 00
PALLETT.—The Millers', Millwright's and Engineer's Guide. 12mo.....	8 00
PROTEAUX.—A Practical Guide for the Manufacture of Paper and Boards. 8vo.....	10 00
RANKINE.—A Manual of Machinery and Mill-work. 12mo.....	5 00
REID.—A Practical Treatise on Concrete and How to Make It. 12mo.....	2 00
REIMANN.—On Aniline and its Derivatives. 8vo.....	2 50
RIFFAULT.—A Practical Treatise on the Manufacture of Colors for Painting. 8vo.....	7 50
ROPER.—Use and abuse of the Steam Boiler. By Stephen Roper. Illustrated. 18mo., tucks, gilt edge.....	3 00
ROSCOE.—Lesson in Elementary Chemistry, Inorganic and Organic. 12mo.....	1 50
ROSE.—The Complete Practical Machinist. 12mo.....	2 50
ROULLEGE.—Bamboo, considered as a Paper-making Material. 8vo., paper.....	50
SLATER.—The Manual of Colors and Dye Wares. 12mo.....	3 75
SMITH.—The Dyer's Instructor; 800 Receipts. 8vo.....	3 00
SPON.—Workshop Receipts for the use of Manufacturers and Mechanics. 12mo.....	2 00
SQUIER.—Tropical Fibres; their Production and Economic Extraction. 8vo.....	2 00
SUTTON.—A Systematic Handbook of Volumetric Analysis. 8vo.....	6 00
THORPE.—Quantitative Chemical Analysis. 12mo.....	1 75
THORPE AND MUIR.—Qualitative Chemical Analysis and Laboratory Practice. 18mo.....	1 50
TOMLINSON.—Manufacture of Paper, with Specimens. 8vo.....	1 00
URE'S DICTIONARY OF ARTS, MANUFACTURES AND MINES.—By Robert Hunt, F. R. S. Illustrated with nearly 3000 engravings on wood. 1867. 3 vols. 8vo.....	25 00
VON BEZOLD.—The Theory of Color in its Relation to Art and Art Industry. 8vo.....	5 00
WEISBACH.—Hydraulics and Hydraulic Motors. With 263 Illustrations. 8vo.....	6 00
WAGNER.—A Handbook of Chemical Technology. Translated and Edited by Wm. Crookes, F. R. S. With 326 Illustrations. 8vo.....	5 00
WATTS.—Dictionary of Chemistry and the Allied Branches of other Sciences. By Henry Watts, F. R. S. With the First and Second Supplements, bringing the record of discovery down to 1874. 7 vols. large 8vo.....	75 00

SEND ORDERS TO

HOWARD LOCKWOOD,

Box 3893 P. O., New York.

Paper Mill Insurance.

ANDERSON & STANTON,

GENERAL

Insurance Agents & Brokers,

No. 152 BROADWAY.

New York, May 1st, 1880.

GENTLEMEN:

Feeling the great disadvantage PAPER-MAKERS have labored under for the past few years in procuring good insurance on favorable terms, we were induced to give this class of INSURANCE particular attention, believing that, with the extensive facilities we possess, good paper mills should be looked upon by the Insurance Companies in quite as desirable a light as manufactories of other classes of merchandise. We, therefore, set to work to overcome the feeling that "Paper Mills are burning at the rate of one a minute" (as expressed by one of the leading agents). This prejudice we thought to be unwarranted, contending that good, well-constructed, carefully managed PAPER MILLS could be insured on favorable terms. With this aim in view we determined to make PAPER MILL Insurance one of our Specialties, and have to-day more mills on our books than any other concern throughout the country.

We would ask Paper-Makers to consider these few questions:

First—Should not well and carefully managed paper mills be insured upon better terms than others?

Second—Will not insurance of this character receive better attention and more just and careful consideration on the part of insurance officers, when brought to their notice by parties doing a large business than if sent through some small agent who cannot PERSONALLY represent the facts to his companies?

Third—Are your policies correctly worded, so that YOU ARE POSITIVELY INSURED?

Fourth—Are you sure ALL the companies in which you hold policies are sound and solvent?

These questions we desire to ask you as a paper manufacturer.

Worthless insurance is worse than none. Badly worded policies lead to litigation. Business centres of course have the largest number of insurance companies; hence, better facilities for placing large lines of insurance.

We now have insurance on property valued at some forty millions of dollars (\$40,000,000), including some of the largest and best known paper mills in the United States, and have yet to learn of any paper-maker who has become dissatisfied with our way of doing business, and we refer to those with whom we have suffered loss as to the prompt and liberal manner in which the same has been adjusted.

We believe that a well-managed paper mill, where the owners have expended large amounts of money for the protection of their property from fire should receive more consideration from the insurance companies than those of careless construction and indifferent management. Each risk should be placed on its merits, and the good ones should not be compelled to pay for the poor.

Should be pleased to send you a Paper Mill Survey, and to hear from you regarding any insurance which you may desire for your mill property, and you can rest assured that it will receive careful attention at our hands. Please write us before renewing any of your policies.

Very truly yours,

ANDERSON & STANTON,

INSURANCE AGENTS AND BROKERS,

152 Broadway, New York.

How to Make Money.

To make money is the height of everybody's ambition. Nobody works for love, neither do they work for fun. But they want to make money, and make it honestly. How are we to do this? Some people have better facilities and better locations for making money than we have. That may be very true. But let it be impressed upon your mind—the necessity of making your store attractive; buy as close as possible, and be cordial and polite in manner. People will notice the former and latter of these requisites more than anything else. What is more pleasing to a customer than a neat, clean store, and, above all, a polite and accommodating storekeeper? It is, of course, very necessary to spend enough money to meet your actual requirements, but never go in debt, and see that you do not spend more than you make. It is again very necessary to carry on the credit system to a certain extent. When you know a customer to be honest, reliable and trustworthy, credit him; but crediting Tom, Dick and Harry will never pay, and in the long run you will find it so. Somebody that you do not know well enough to trust might ask you to credit him for twenty-five cents' worth of this or fifty cents' worth of that, and will settle up with you regularly for a short time, but he, knowing that he can get credit from you, will keep on increasing the account until you get anxious and present the bill, and, in three cases out of four, you will get nothing from him. It is better to sell ten dollars' worth of goods for cash than twenty-five dollars for credit. Anybody that has been carrying on a credit business will tell you the same thing. Above all things, be honest. If a customer wants a pound of this or a pound of that, do not give him a pound and a quarter nor seven-eighths of a pound, but give him just one pound, for, by giving him too much you are cheating yourself, which is just as sinful as if you cheated him. Devote your whole time in pursuit of your business. If you have any time to spare, devote it either to arranging the goods in your show-cases or upon the shelves, or read something that will benefit you and your business. Find out where you can buy your goods the cheapest for cash and go there, no matter how long you have been buying from the other man. By doing these things your business will prosper.—New York Grocer.

Honesty in Business.

The one method to be observed above all others in business pursuits is honesty. This should be the central force, and around it all other agencies in harmony revolve. To be honest at all cost is the safest capital investment. The interest is always sure, regularly paid, and with increasing dividends. When an upright merchant comes into the market, he finds his honorable record has preceded him, and ready access is granted to the best firms in trade. Customers of this stamp are anxiously sought after, and character is of as much, if not more account than capital. Large establishments seek to retain this kind of custom, and if any favors are shown, it is always to this class. It is important to have method, capital, concentration and energy in business, but more important to possess honesty. Method is necessary, but may sometimes resort to mean practices. Capital is a power, but may be directed to acquire unjust gains. Concentration is of vital account, but is often centred on dishonest ways of acquiring wealth more rapidly. Energy is of practical value, but too frequently pushes in the wrong direction. Add to these honesty, and the circle is complete in which business will move onward with a flow as steady as the tides and as sure as the sun.

Honesty is conservative, fears speculative methods, and seeks for the best modes of operation. It shrinks from incurring large liabilities, is anxious to be free from debt incumbrances and daily tries to strengthen its position. As far as possible it prefers the cash system, and when this is not always convenient will at once prepare for settling day. A merchant, to be successful in the long run, must be an honest man. This is his strongest power, his surest agency, his only happy way of managing affairs. There is a fascination and charm in the regular pursuit of the occupations of life when they are controlled and regulated from a high and conscientious discharge of duty. This adds dignity to every profession, every trade, every legitimate calling. It is a satisfaction to look back over the early struggles of a business career and realize that in the most trying days honor was never sacrificed for expediency; to know that the fortune which crowns long years of toil has been fairly and honestly accumulated. Wealth thus acquired is a blessing, a benefit and a deserved reward.

It is not so, however, when gained through deceit, fraud and trickery. It affords no delight in the retrospect, and is applauded only through fawning. There is a canker in the gold that comes dishonestly, and a skeleton in every feast it provides. It usually curses its possessor or, if not, his heirs. Deceit, falsehood and treachery in business are the forerunners of disaster. False weighing, false counting and false methods lead to forced balances on ledgers, and too frequently project failures in which liabilities are far in excess of assets. A dishonest merchant should not be trusted. He is entitled to neither consideration nor credit. He will cheat at every opportunity, and swindle confiding creditors when he can make more by bankruptcy than to continue in business. Dishonesty is building on the sand; the foundations are insecure and unstable. There is no permanence for the future. Honesty is building on the rock. Character rises fair and shapely, crowned with success, joyful in the retrospect and gladdening as it glances forward. The happiest, most successful business man is the one that is honest and straightforward from beginning to end.—U. S. Economist.

Some Hints on Advertising.

American paper-makers have not been slow to avail themselves of the newest and best ideas for improving their industry and developing their trade, but they have singularly neglected one fundamental principle of business, which the keen and pushing merchant finds of great practical value. Very few paper-makers consider the worth of advertising, and many forget that a journal recognized as their representative and devoted to their interests has claims upon them which they ought to acknowledge. But, aside from the newspaper view of the value of advertising, the paper trade ought to see at once the importance of availing themselves of the advantages offered by a weekly trade publication through which they can communicate quickly and at small expense with any department of the business. For general advertising purposes, for the sale of goods and paper-mill property and for obtaining hands, they will find that their trade paper, published frequently, is an unsurpassed medium for accomplishing their desires.

The reason why American paper manufacturers should advertise are as follows:

- 1. The more widely any concern is known the better are its chances for doing business.
2. Old houses cannot rely upon the fact that they are well known. Younger men are in the field, and their eager competition must be met.
3. Dealers in cities throughout the country are often puzzled where to find some special grade of paper of which they require a larger supply than they can obtain near by.
4. With present low rates of freights paper can be shipped to very distant points and sold at a profit.
5. Most paper-makers manufacture some specialty, for which a high reputation can be made by advertising judiciously.
6. Advertising firms are usually the most active, and it is desirable to have one's business card in company with those of the most enterprising houses in the trade.
7. Importers and dealers in paper stocks and materials are more apt to offer their best bargains to such mills as they are being constantly reminded of, through their regular advertisements.
8. American paper mills are destined to supply the markets of the world in the course of a few years. Our export trade has opened and all that remains is for our manufacturers to be wide awake and avail themselves of the present and coming opportunities.

These and many other reasons demonstrate the importance of advertising to paper-makers, and apply with equal force to manufacturers of all grades of paper.

A card in THE PAPER TRADE JOURNAL, stating briefly the firm name and address, the class of paper made, and the special merits claimed for the product, will go constantly before all the principal dealers in the country, and also the chief publishers, printers and stationers. It will further gain the attention of the trade in foreign countries, as THE JOURNAL circulates largely throughout Great Britain, France, Germany, and other European countries, the West



The Hudson River Champion.

This Celebrated Turbine has no equal for the use of Grist Mills, and is well adapted to all other kinds of mills. We cannot boast of numbers sold. It is comparatively a new wheel, yet they are in use in nearly every section of the country, and

GIVING THE BEST SATISFACTION.

We do not expect millwrights to recommend them. We sell them so low that they cannot expect large commissions from us.

To mill men we speak: We offer you the very best Turbine built in the country at astonishing low prices, and warrant every wheel to give satisfaction, or no sale.

P. H. WAIT,

Mechanical and Hydraulic Engineer, SANDY HILL, N. Y.

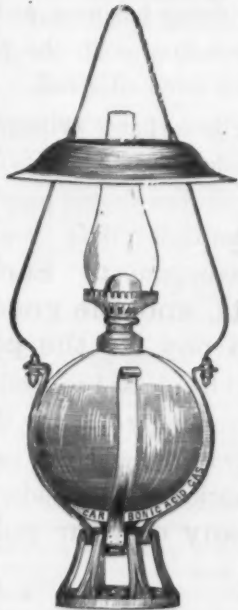
EVERY WHEEL WARRANTED.

Westland Safety Lamp

FOR PAPER MILLS AND MANUFACTURING ESTABLISHMENTS GENERALLY.

F. H. LOVELL & CO.,

118 John & 233 Pearl Sts., NEW YORK.



PRICE, \$34.00 PER DOZ., COMPLETE.

PRICE, \$34.00 PER DOZ., COMPLETE.

WESTLAND'S PATENT SAFETY LAMP.—Kerosene oil is now in such almost universal use for illumination that anything which makes it safer for life and property is a great public benefit. The new "Patent Safety Lamp," recently invented by Charles S. Westland, of this city, is claimed to be the best lamp yet produced for safe protection from all dangers in burning kerosene and other inflammable oils, its great advantage being that, in case of the breaking or bursting of a lamp, it extinguishes itself. Each of these new safety lamps contains a hermetically sealed chamber of carbonic acid gas that escapes and prevents the oil from taking fire on breakage of the lamp, as has been conclusively proven by experimental tests made with a large number of these lamps. A practical test of the new lamp was made at the Hope Iron Foundry, last Tuesday afternoon, before several insurance men and manufacturers, with satisfactory results to all present; and this test was a severe one, the lamp being heated, outside, until it exploded, while lighted, and was extinguished by the escaping gas.—Providence Journal, June 1, 1880.

Indies and South American States, and such distant lands as China, Japan, Australia, New Zealand, New South Wales, and the Sandwich Islands. It will thus be seen that THE PAPER TRADE JOURNAL offers the greatest inducements to American paper-makers for advertising purposes.

As to the character of an advertisement, the following offers the best suggestions: The best time to advertise is all the time. Spasmodic advertising, like intermittent labor, is not always productive of large results. An ordinary business card forms matter for a very good advertisement. A small card in every issue of a paper is better than a large one occasionally. A small card once a month is better than none at all.

For further particulars address Howard Lockwood, publisher PAPER TRADE JOURNAL, 74 Duane street, New York.

BRITISH COLONIAL PRINTER & STATIONER

And Paper Trade Review.

5 Ludgate Circus Buildings, London, E. C.

The most Independent, and Largest Circulation of any journal devoted to the English trade. Latest News and Original Articles.

PRINTING, STATIONERY and PAPER.

American houses please send news and specimens. Subscription, \$3 per annum, payable to W. John Stonhill.

THE PAPER MAKERS' Monthly Journal.

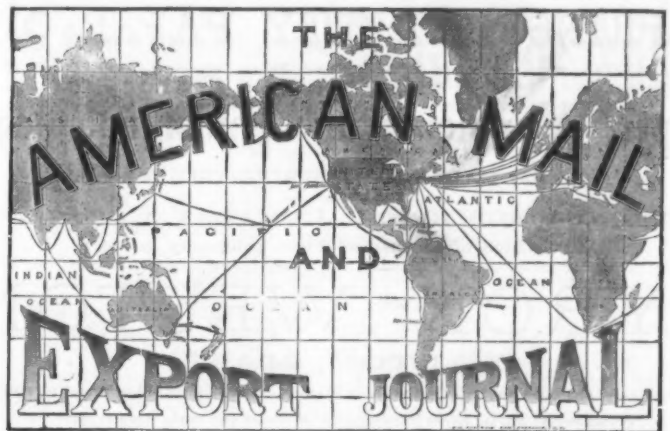
ORGAN OF THE ENGLISH TRADE. Imperial Octavo.

SUBSCRIPTION AND POSTAGE FOR THE UNITED STATES AND CANADA, SEVEN SHILLINGS PER ANNUM IN ADVANCE.

THE PAPER MAKERS' MONTHLY JOURNAL is the only recognized representative of the Paper Trade in Great Britain; it is published under the auspices of the Paper Makers' Club in London, and is the acknowledged means of intercommunication for the Association of Paper Manufacturers of the United Kingdom. It contains authentic particulars of Markets, Trade Matters, Export and Import Returns, Meetings, Deputations, and the affairs of the Trade generally.

MERCHANT, SINGER & CO., PUBLISHERS, 1 and 2 Ingram Court, London, England.

Table with 2 columns: Advertisements, 1 insertion, 12 insertions. Prices listed for one page, half page, and quarter page.



THE AMERICAN MAIL AND EXPORT JOURNAL is a medium for communication between American Manufacturers and Exporters and the Foreign Trade. Its idea and duty is to explain to people of other lands the nature, variety and advantages of American products, whether they come from the soil or the workshop. Its subject matter includes articles upon Engineering and Machinery, Hardware, Textiles, Leather, Glass and Earthenware, Clocks, Watches, &c., Paper, Stationery and Fancy Goods, Metals and Mining, Drugs and Chemicals, Wines and Spirits, Freights, Produce, Provisions, Finance and Investments, and other topics of general interest.

Agencies have been established in the following cities: In Europe, at London, Paris, Berlin, Vienna, St. Petersburg, Stockholm, Christiania, Venice, Turin, Antwerp, Amsterdam, Florence, Trieste; in South and Central America and West Indies, at Rio de Janeiro, Pernambuco, Rio Grande, Valparaiso, Valdivia, Barranquilla, Panama, Puntarenas, Montevideo, La Guaira, Havana, Matanzas, Curacao, La Paz, Barbadoes; in Australia, New Zealand and Tasmania, at Sydney, Melbourne, Brisbane, Adelaide, Auckland, Dunedin and Hobart Town; in China and Japan, at Poochow, Shanghai, Newchwang and Yokohama; also at Honolulu, Sandwich Islands, and at hundreds of other cities throughout the world.

"The American Mail and Export Journal" is kept regularly on file at all American Consulates and Commercial Agencies, wherever established, and in this manner alone is brought under the direct attention of merchants and shipping houses doing business with the United States.

This Journal is also on file at over one thousand Chambers of Commerce, Boards of Trade, Banking Houses, Hotels, Reading Rooms, Libraries, Shipping Offices, &c., in important cities in all parts of the world. "The American Mail and Export Journal" is sent regularly to the Export and Shipping Merchants in the cities of New York, Philadelphia, Boston and Baltimore, and to the same class of houses in London, Liverpool, Manchester and Birmingham. The English Export Merchants alone number about 5,000, and ship goods to all parts of the world.

The main portion of "The American Mail and Export Journal" is printed in English, that being the chief commercial language of the world.

A very complete classified list of advertisers appears in each number, with headings in five languages. This Glossary enables readers not understanding English to refer at once to the advertisements they are interested in.

This Journal was started in June, 1877, after upwards of a year having been occupied in establishing Agencies, and arranging for its careful distribution throughout the world. Our Agents, established all over the world, are using their best endeavors to promote the introduction of American goods.

OPINIONS OF THE PRESS OF THE WORLD!

EXTRACTS FROM NOTICES BY THE FOREIGN PRESS.

- La Siglet, Paris, July 29, 1877.—A magnificent and excellent commercial journal.
London Stationer and P. G. Register, July 6, 1877.—Beautifully printed and otherwise excellently well produced.
Capetown Daily News, August 21, 1877.—A very useful and carefully got up trade circular, published in New York.
Newsvender, London, August 15, 1877.—It deserves to be prosperous if the promise in the first number is maintained.
Evening Star, Dunedin, New Zealand, August 25, 1877.—We think it likely to prove a valuable aid to commercial men.
Yokohama Gazette, Yokohama, August 27, 1877.—This sample of a new venture gives abundant promise of future excellence.
City Press, London, August 15, 1877.—The articles are well written, and the information on trade matters full and interesting.
Sunderland (Eng.) Daily Times, August 20, 1877.—The idea is a grand one, and the style in which the new venture is got up ought to go far to render it a success.
Paper Makers' Monthly Journal, London, July 31, 1877.—Excellent arranged, admirably printed on fine paper, and illustrated, this new venture looks like succeeding.
Riponshire Advocate, Beaufort, Victoria, September 25, 1877.—The paper has been got up in a first-class manner, and for a first number is a marvel of completeness and good work.
La Verdad, Valdivia, Chile, August 5, 1877.—An important publication, exclusively industrial, and from it we shall have much useful information to communicate to our subscribers.
Bendigo Advertiser, Sandhurst, Victoria, September 21, 1877.—It contains a large amount of information, and will assuredly do much to forward the interests of the American export trade.
Grenville Advocate, Smythesdale, Victoria, September 15, 1877.—The manner in which the journal is got up we have seldom seen excelled, and it is well worth the support of all merchants and manufacturers.
The Citizen, Gloucester, Eng.—It aims, by a system of world-wide agency, to find for the multitude of useful and ingenious American inventions that publicity which is only needed to secure for them a brisk and general demand.
Export Mercantile Advertiser, London, August 7, 1877.—The proprietors propose to themselves the advancement of American trade all over the world, and, we think, will do it. We cannot but wish success to our new competitor.
British Mercantile Gazette, July 15, 1877.—Mr. Lockwood's resources in the matter of trade journalism are extensive, but whatever he does he does exceedingly well, and his latest venture does him infinite credit, and bids fair to be a great success.
Rochester Marsh Express, Victoria, September 22, 1877.—It contains descriptions and illustrations of many novelties which the Americans are always producing, but which cannot be got in these colonies, although they would be as useful here as in America.
Rangoon Times (India), September 4, 1877.—We wish the new venture every success, and without wishing to disparage the work of the "old country," feel bound to confess that in many things the American surpasses us, and notably so in the manufacture of articles for domestic use.
Bermuda Royal Gazette, Hamilton, October 25, 1877.—"The American Mail and Export Journal" of New York, surpasses the English papers in type, in press work, in rich illustrations, and indeed in general information. Copies of "The American Mail" can be seen at our stationery store.
Civil and Military Gazette, Lahore, India, August 21, 1877.—The promoters believe that American manufacturers do not fully realize the opportunities of increasing their export trade, and the object of the publication is to be a means of communication between American manufacturers and the trade throughout the world.
Deccan Herald, Poona, India, August 22, 1877.—It gives us a vast deal of information regarding things of which we know but little. The paper is evidently in the hands of real go-ahead Americans. Our English merchants had better look sharp, otherwise they will find the foreign market contested with them by American merchants. We think we have said enough to show the character of the new journal, and to serve as a warning to English merchants in regard to the competition with which they are threatened.
Graaff-Reinet Advertiser, Transvaal, Africa, September 4, 1877.—What strikes one on perusing this journal is the extraordinary activity of the American mind and the force with which it is directed to compete with the rest of the world in the industrial arts. The Centennial Exhibition has shown the Americans their manufacturing strength; and emboldened by a comparison of the works of their hands with those of other countries, they now feel themselves able to compete in most things with other nations in the markets of the world.

The above are merely brief extracts. Many of the journals quoted have given full column notices to "The Mail and Export Journal" and its mission. Sample copies and further information forwarded upon application to P. O. Box 3893. HOWARD LOCKWOOD, Publisher, 74 Duane St., New York.

CLEVELAND WIRE WORKS,
W. S. TYLER, Proprietor,
—MANUFACTURER OF—
FOURDRINIER and CYLINDER WIRES,
Dandy Rolls, Cylinders, &c.
Cylinders and Dandys made, repaired and covered
Designing and Lettering Dandys a Specialty.
CLEVELAND, OHIO.

GEORGE HARLEY,
Importer of California Rags,
And Dealer in
**WOOLEN and COTTON RAGS, and all
kinds of PAPER STOCK.**
362, 365 & 367 THIRD STREET
between Avenue D and Lewis St., **NEW YORK.**
F. GRAY W. C. GRAY H. C. NELLIS.

PIQUA WOOLEN MILLS.
F. GRAY & CO.,
MANUFACTURERS OF
**FOURDRINIER and CYLINDER
FELTS,**

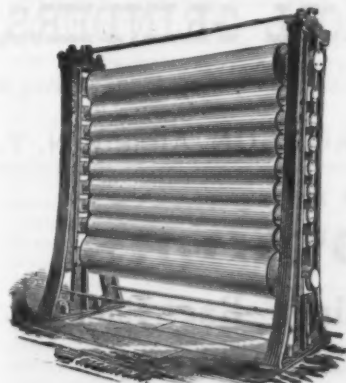
Press Felts and Jackets
for all kinds of
Paper.

Special attention is invited to
our **FOURDRINIER FELTS** for
FAST RUNNING ON NEWS,
which are unsurpassed.

ALSO, TO OUR
"EUREKA FELT,"
For Fast Running on Cylinder Machines

Which we have perfected within the last few months,
and which is rapidly gaining favor with Paper Makers,
wherever it is used.
EXTRA HEAVY CANVAS DRYER FELTS,
all widths, cut to any length, at Manufacturers' Prices.
WE WARRANT EVERY FELT to work well,
and if it does not, it can be returned.
We also manufacture Blankets, Flannels, Stocking
Yarns of all Colors, and Men's Heavy Wool Socks.
Also, an Extra Heavy 6-4 Scarlet and White
Flannel for underwear, which we guarantee not to
Shrink. All the above we offer to Paper Makers at
the Lowest Wholesale Prices, in quantities to suit.

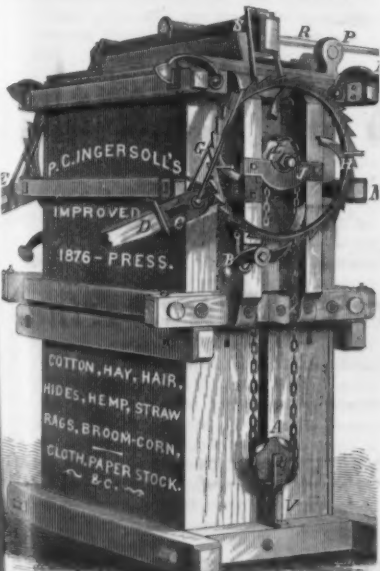
Very respectfully,
F. GRAY & CO., Piqua, Ohio.
THE J. MORTON POOLE CO.,
Wilmington, Delaware.



MANUFACTURE

Chilled Rolls
GROUND BY THEIR PATENT PROCESS.

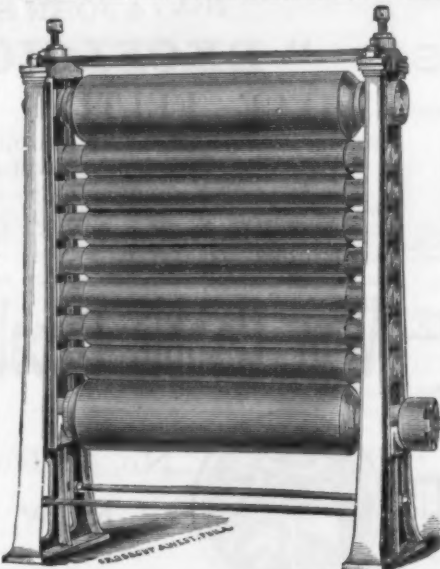
PRESSES FOR BALING PAPER RAGS, &c.



Send for Circulars, Price List, Terms, &c., to the
Manufacturer, **JAMES N. BALSTON** (Successor
to Ingersoll & Balston.)
Greenpoint, Kings Co. N. Y.

BDELL CAR WHEEL COMPANY,
WILMINGTON, DEL.

The Oldest and Most Extensive Manufacturers of Chilled Car Wheels in this or any other Country.



**EXTRACT OF AWARD ON CHILLED
ROLLS.**

The undersigned having examined the
product herein described respectfully recom-
mends the same to the United States Centennial
Commission for award, for the following rea-
sons, viz.:

This exhibit contains a stack of calender-
ing rolls intended to be part of a complete
paper machine. These rolls are of cast-iron,
chilled at the surface in casting, and thereby
made hard, like tempered steel. They are
separately ground according to a highly im-
proved plan, and are so true that, when placed
together, they bear upon each other through-
out their entire length. This exhibit has
the exceptional merit that the rolls are
not only GROUND true but CAST by
the exhibitor.

(Signed) **JAMES M. WILCOX,**
Signature of the Judge.

ALSO MANUFACTURERS OF
CHILLED ROLLS

For Paper Machines, Rubber, Brass, Copper, Rolling Mills, &c.

The vast quantity of iron used daily in the business of this establishment permits the very best selection
for the composition of CHILLED ROLLS. The long experience of Mr. Geo. G. Lobdell in making chilled
castings, and who personally directs the selection, enables them to make
CHILLED ROLLS UNEQUALLED IN QUALITY AND GROUND AS PERFECTLY AS ANY OTHERS
GEO. G. LOBDELL, Pres. W. W. LOBDELL, Sec. P. N. BRENNAN, Treas.

GEO. S. BAILEY, President and Treasurer. LEWIS C. STONE, Manager.

Rice, Barton & Fales Machine and Iron Co.

AT OLD STAND OF RICE, BARTON & CO.,
WORCESTER, MASS.,
MANUFACTURERS OF

PAPER MACHINERY

OF EVERY DESIRABLE VARIETY,

Iron and Brass Castings, Chilled Iron and Paper Calender Rolls, Rag Engines,
Rag Cutters, Steam Pressure Regulators, &c.
HYDRAULIC PRESSES, FROM 5 to 14 INCH PISTON.

WM. PICKHARDT & KUTTROFF,

98 Liberty Street, New York.

BRANCHES AT BOSTON AND PHILADELPHIA.

—IMPORTERS OF—

Aniline Colors, Carmine, Pulp Colors, Eagle Brand
Ultramarines, N. C. F. Concentrated Alum.

BRIGHTMAN'S PATENT ENGINE.

THE INVENTOR HAS SUCCEEDED IN PERFECTING

The Best Beating and Refining Engine
IN USE.

MANUFACTURED AND FOR SALE BY THE

CLEVELAND PAPER CO., Cleveland, O.

POOLE & HUNT'S

Leffel Turbine Water Wheel,

Made of best materials and in best
style of workmanship.

A large stock constantly on hand.

**MACHINE MOULDED
MILL GEARING,**

from 1 to 20 feet diameter, of any
desired face or pitch moulded
by our OWN SPECIAL MACHINERY.

**SHAFTING, PULLEYS,
AND HANGERS,**
of the latest and most improved
designs.

**STEAM ENGINES, BOILERS, SAW MILLS, MIXERS and GENERAL
OUTFIT FOR FERTILIZER WORKS.**

Shipping facilities the best in all directions.
POOLE & HUNT, Baltimore, Md.
N. B.—Special attention given to heavy Gearing for Pulp and Paper Mills.

C. GILBERT'S STARCH WORKS.

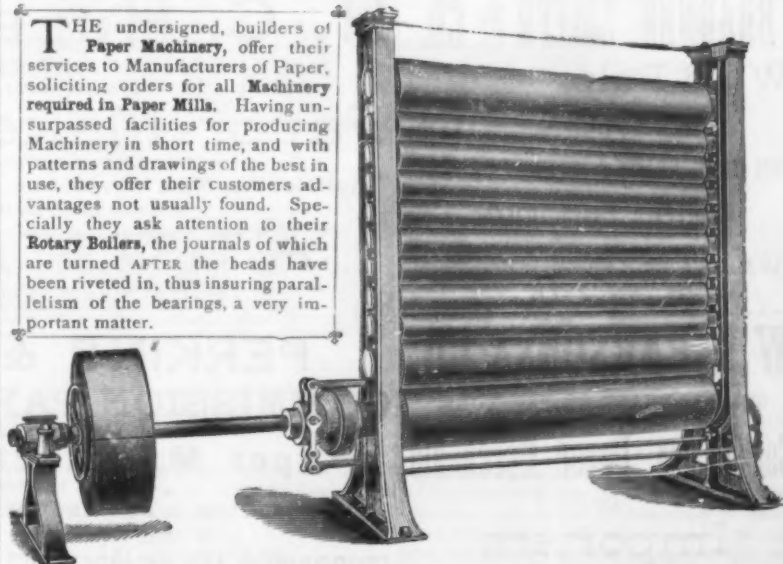
ESTABLISHED
IN
1864



OFFICE AND SALESROOM,
Nos. 41 & 43 Exchange St.,
BUFFALO, N. Y.

Starch for Paper Manufacturers Especially.

THE undersigned, builders of
Paper Machinery, offer their
services to Manufacturers of Paper,
soliciting orders for all Machinery
required in Paper Mills. Having un-
surpassed facilities for producing
Machinery in short time, and with
patterns and drawings of the best in
use, they offer their customers ad-
vantages not usually found. Specially
they ask attention to their
Rotary Rollers, the journals of which
are turned AFTER the heads have
been riveted in, thus insuring paral-
lelism of the bearings, a very im-
portant matter.



The undersigned also call attention to their **CHILLED IRON CALENDER ROLLS**,
which they guarantee to be **ABSOLUTELY PERFECT**, both as to hardness and excellence
of finish.

Address **THE PUSEY & JONES COMPANY,**
Wilmington, Delaware.

WRIGHT'S WATER WHEEL GOVERNOR

For Regulating the Speed of Water Wheels.

Patented Nov. 17, 1874, and Oct. 19, 1875.



It is quick and positive in its working, and
not liable to get out of order. It has an ad-
justable speed arrangement by means of which
the speed of the wheel may be varied, and a
self-acting stop motion which stops the action
of the Governor when the gate is entirely
raised or closed, so there is no liability of
strain, or breaking of gears.

EDWARD WRIGHT & CO., Sole Manufacturers and Patentees, WORCESTER, MASS.
Manufacturers of Noiseless Doffer Combs and Water Wheel Governors.

AMERICAN ULTRAMARINE WORKS.

HELLER & MERZ,
MANUFACTURERS OF

ULTRAMARINE

Especially for Paper Manufacturers.

55 Maiden Lane, New York.

ESTABLISHED IN 1855.

ILLINOIS STARCH COMPANY.

Special attention given to the manufacture of Starch for the Paper Manufacturers.

SAMPLES FURNISHED ON APPLICATION.

AMORY BIGELOW, Agent, 105 South Water Street, Chicago, Ill.

Steam and Power **PUMPS** For Paper Mills.

Capacity from 100 to 1,000 Gallons per minute.

Manufactured by **SMITH, VAILE & CO.,** DAYTON, Ohio.

Unrivaled for Simplicity, Durability and Economy. Made from Entirely New Designs,
with Patent Removable Cylinders. They require less power to raise a given
amount of water than any other pump in the market.

Over Fifty of the large Paper Mills
in the West have them in use.

Prices for any capacity sent on
application.

MIAMI, O., Feb. 6, 1880.
Messrs. Smith, Vaile & Co.:
The Pump is working splendidly, doing all
that was claimed for it, and we consider it
the best investment we have ever made in
the way of improvements to our mill.
SCHULTZ & MANNING.



CONTINENTAL WORKS,

Manufacturers of Ledby & Duc's Patent
Best Centrifugal Pump
FOR PAPER MILLS.

Drainage and Irrigating Purposes, and Reclaiming Marsh Lands; also for
Oil Works and Tanneries.

Duc's Elevator Bucket.

IS PRONOUNCED THE BEST FOR PAPER MILLS.
It is made of the best Charcoal Iron. Has No CORNERS to catch, and will outwear
Six Old-Style Square Buckets.

Sole Manufacturer, **T. F. ROWLAND, Brooklyn, N. Y.**



CHENEY BIGELOW WIRE WORKS,
SPRINGFIELD, MASS.



Manufacturers of Improved Wove and Laid **DANDY ROLLS**, Patented
Seamless Wove **DANDY ROLL COVERS**, &c., &c.
WIRE CLOTH FOR PAPER MILLS A SPECIALTY.

BRADNER, SMITH & CO.
Wood Pulp,
Straw Pulp,
FOR BOOK, PRINT & MANILLA PAPERS.
WHOLESALE PAPER DEALERS,
119 Monroe & 2, 4, 6 & 8 Custom House Place,
CHICAGO.

W.H. PARSONS & CO.
83 and 85 DUANE ST., NEW YORK,
Commission Paper Merchants
AND
Importers
OF
PAPER MAKERS' SUPPLIES.
French and English Linen and Cotton Rags,
and Papers of all grades, on hand
and to arrive.

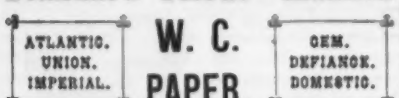
LEGHORN RAGS,
OF THE WELL-KNOWN BRAND

ALL LINES
ON SALE, ON HAND, AND TO ARRIVE, BY
J. & B. FABBRICOTTI,
No. 15 Broadway, - - New York.
P. O. BOX 4554.

LEE & STURGES,
COMMISSION MERCHANTS,
23 Beekman Street,
P. O. Box 2,867 NEW YORK.
FOREIGN RAGS AND PAPERS.
SOLE AGENTS FOR THE CELEBRATED
BRANDS
P of Messrs. John Pfeffer & Co.,
France and Belgium.

WING & EVANS,
DEALERS IN
Soda Ash, Caustic Soda,
Sal Soda, Bi-Carb. Soda,
and Bleaching Powder,
92 WILLIAM STREET, N. Y.
Agents for Newcastle Chemical Works Co.,
Limited, Newcastle-on-Tyne, England.

Wood Pulp,
WET or DRY,
Delivered in any part of the country, in quantities to suit.
IRA L. BEEBE,
44 & 46 Duane Street, N. Y.
FETT & SENGSTAK,
59 William St., N. Y.,
IMPORTERS
Rags and Paper Stock.

SOLE AGENTS OF THE
FETT'S STANDARD PACKING.
ROSS WHITE,
Manufacturer and Wholesale Dealer in
Standard Tissue - Manilla

20 Reade Street, New York.

SERGEANT BROS.,
78 William St., New York, P.O. Box 3912.
HAVE ALWAYS ON HAND AND TO ARRIVE
FOREIGN RAGS,
JUTE AND PAPER STOCK
CHEMICALS, CLAYS,
ANIMAL AND ROSIN SIZE.
ALSO AGENTS FOR
The Swan Brand Silesian White and
H. & S. Brands Southern Clays.

H. C. HULBERT & Co.,
13 BEEKMAN ST., NEW YORK.
-Importers of and Dealers in-
Paper Makers' Supplies.
SOLE AGENTS FOR OVER TWENTY YEARS FOR THE SALE OF
"Stubbins Vale Mills" FELTS, PEARL HARDENING and "Berger" ULTRAMARINE.
Also Sole Agents for the following Brands of
ALUM: H H H H
Extra Heavy Canvas for Dryers.

PERKINS & GOODWIN,
COMMISSION PAPER WAREHOUSE.
IMPORTERS AND DEALERS IN
Paper Manufacturers' Supplies.
SOLE EASTERN AGENTS FOR
SHUTTLINGHOFFEN, OF HAMILTON, OHIO,
WELL-KNOWN MANUFACTURERS OF
FOURDRINER CYLINDER WET FELTS, PRESS FELTS AND JACKETS
of many equal to the best foreign felts, at a much lower price.
Extra Heavy Canvas Dryers.
14 DUANE STREET, NEW YORK.

HUDSON RIVER PULP AND PAPER CO.
MANUFACTURERS OF
News, Colored and Manilla Papers,
Hanging and Card Middles.
ALSO REFINED SPRUCE AND POPLAR WOOD PULP,
Suitable for Book, News and Manilla Papers.
MILLS AT PALMER'S FALLS, N. Y. | NEW YORK OFFICE, 45 BEAVER STREET.

EXTRA CONCENTRATED PEARL ALUM FOR PAPER MAKERS' USE.
The Richest in Sulphate of Alumina, and 20 per cent. Stronger than the Strongest Alum in the Market.
2 lbs. Pearl Alum will do as much Sizing as 3 1/4 lbs. Potash or Ammonia Alum.
CONTAINS NO FREE ACID.
See following from Prof. S. DANA HAYES, Massachusetts State Chemist.
Messrs. HARRISON BROS. & Co. Boston, February 15th, 1879.
Gentlemen:—I have analyzed a sample of "EXTRA CONCENTRATED PEARL ALUM" received from you, with the following results: I find that it contains no free acid, and that there is present 64.11 per cent. of anhydrous sulphate of alumina, which dissolves readily in water. This "Alum" is, therefore, remarkably rich in available sulphate of alumina, and of excellent quality. Respectfully,
(Signed,) S. DANA HAYES, State Assayer, Massachusetts.
HARRISON BROS. & CO.
Manufacturers of Extra Concentrated PEARL ALUM, Lump and Ground Alum, ALUMINOUS CAKE, Oil of Vitriol, White Lead, Colors for Paper Makers and Painters, Sugar of Lead and other Chemicals.
Offices: 35th STREET & GRAY'S FERRY ROAD and 105 SO. FRONT STREET, Philadelphia, 117 FULTON STREET, New York. Agents at Boston, E. & F. KING & CO.

— ESTABLISHED 1853. —
J. W. LYON & CO.,
RAG WAREHOUSE,
35 Park St., also 44 & 46 Duane St., New York.
FOREIGN AND DOMESTIC PAPER STOCK AND WOOLEN RAGS OF ALL DESCRIPTIONS.
Cash paid for all kinds of WOOLEN RAGS and PAPER STOCK in large or small lots.

Natrona Porous Alum,
FOR PAPER MAKERS' USE.
FREE FROM IRON AND FROM EXCESS OF ACID.
Two pounds of it will size as much Paper as three and one fourth pounds of Potash or Ammonia Alum.
PENNSYLVANIA SALT MFG. CO.,
140 South Delaware Avenue, Philadelphia. 219 Washington Avenue, St. Louis, Mo.
Agents: W. M. ELLICOTT & SON, Baltimore; MOREY & CO., Boston; E. L. EMBREE, New York.

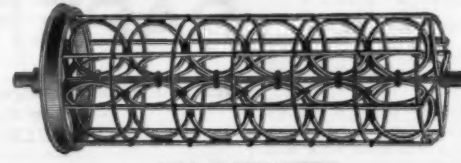
KENDALL BROTHERS,
Commission Merchants,
HAVE ALWAYS ON HAND AND TO ARRIVE
Most Reliable Packings of Linen and Cotton Rags, Jute, Manilla and Paper Stock, Bleaching Powders, Soda Ash, Chemicals, Clays, Rosins, Starch, &c., &c.
66 John Street, Cor. William, New York.
P. O. BOX 3862.

BUTTERWORTH & SMALLEY
54 Beekman St., New York; 58 Federal St., Boston, Mass.,
PAPER STOCK AND SIZING MERCHANTS.
DEALERS IN EVERY KIND OF
MATERIAL FOR PAPER MAKERS,
Jute, Hemp and Flax Waste, Papers, Rags, Hemp and Gunny Bagging, Jute Butts, &c.
French Linens, Cottons, &c., always on hand. Sizing prepared at our hide yards, Salford.
HEAD ESTABLISHMENT:
EDWIN BUTTERWORTH & CO.,
2 Ward's Buildings, Deansgate, Manchester, England.

BULKLEY, DUNTON & CO.,
NO. 74 JOHN ST., NEW YORK.
"EXCELSIOR" FELTS.
PIECE FELTING AND JACKETING.
FOR ECONOMY, DURABILITY AND GOOD RESULTS THEY ARE UNEQUALED.
LONG ESTABLISHED AND WELL KNOWN. A TRIAL IS SOLICITED FROM MANUFACTURERS NOT ALREADY USING THEM.
EXTRA HEAVY CANVAS DRYERS.
SATISFACTION GUARANTEED. SEND FOR PRICE LIST

Wm. Cable Excelsior Wire Mfg. Co.

No. 43 Fulton Street,
NEW YORK.
Manufacturers of
Superior Fourdrinier Wires, Brass, Copper and Iron Wire
Cylinder Wires, Dandy Rolls,
Brass, Copper and Iron Wire Cylinder Molds
Cloth of every description, Best Quality of Wire Rope.
Write for Price List.

SELLERS & CO.,
No. 23 North Sixth Street, Philadelphia.
SOLE MANUFACTURERS OF
Whitehead's Patent Dandy Roll

ALSO MANUFACTURE
FOURDRINIER AND CYLINDER WIRES,
Wire Cloth for Washers, Dusters, &c.
CYLINDERS AND DANDY ROLLS MADE AND REPAIRED.
Lettering and Designing on Dandy Rolls executed Neatly and Promptly.

IMPORTANT TO PAPER MANUFACTURERS!
We have now running at our works one of
POOLE'S PATENT ROLL GRINDERS,
and are prepared promptly to regrind Old Rolls, soft as well as chilled.
Manufacturers can rely upon having their rolls ground perfectly, and at a material saving of freight, by applying to
TOWNSEND & JACKSON, Albany, N. Y.

ESTABLISHED 1826.
LEWY BROTHERS,
German and Russian Linen Rag Packers.
BERLIN and KOENIGSBERG, Germany.
New York Office: No. 12 BROADWAY.

GEO. WATSON, JR.,
(Late BRAUTIGAM & WATSON),
—IMPORTER OF—
Paper-Makers' Stock and Materials,
WHITEHEAD'S FELTINGS
Aluminous Cake, Curtius' Ultramarine.
—DEALER IN—
FOREIGN AND DOMESTIC RAGS.
Nos. 63 and 65 Beekman Street,
NEW YORK.